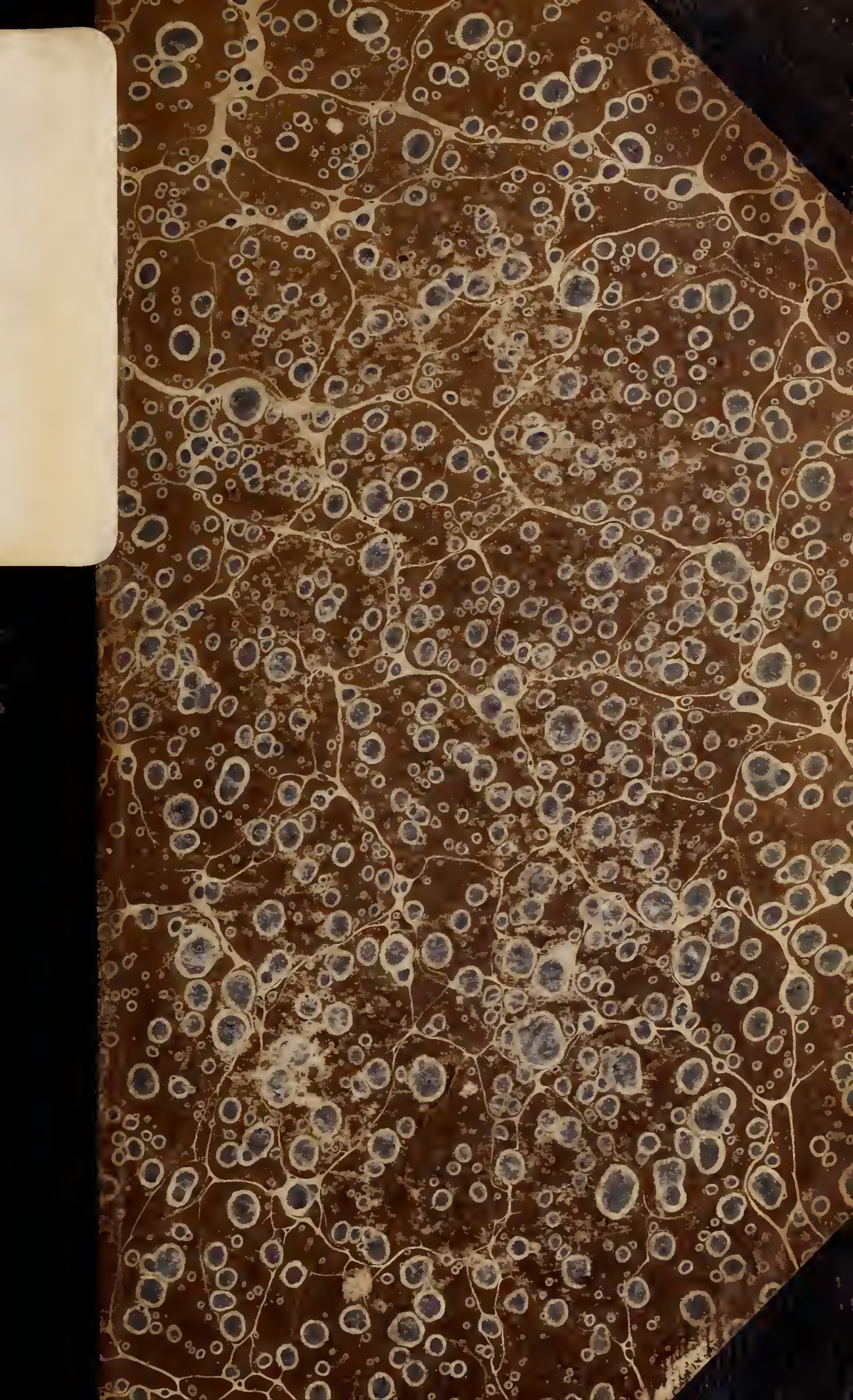

HISTORICAL COLLECTION
SERIAL

v 2

A

Dec 1866 - May 1867

Columbia University
in the City of New York
College of Physicians and Surgeons

Library

Digitized by the Internet Archive
in 2014

https://archive.org/details/americaneclectic2712free

THE

AMERICAN

ECLECTIC MEDICAL REVIEW.

EDITOR,
ROBERT S. NEWTON, M. D.,
PROF. OF SURGERY IN THE ECLECTIC MEDICAL COLLEGE OF THE CITY OF NEW YORK.

ASSOCIATE EDITOR,
EDWIN FREEMAN, M. D.,
PROF. OF ANATOMY IN THE ECLECTIC MEDICAL COLLEGE OF THE CITY OF NEW YORK.

VOLS. I.—II.

From June, 1866, to June, 1867.

NEW YORK:
JOHN F. TROW & CO., PRINTERS, 50 GREENE STREET,
BETWEEN GRAND AND BROOME STS.
1866–7.

CONTENTS OF VOLUMES I. AND II.

Abstract from Braithwaite's Retrospect, ii. 41, 283
Abstract of proceedings of the Eclectic Medical Society of the State of New York, i. 89
Acetic acid, injections of in cancerous tumors, ii. 269
Act of Incorporation of the Eclectic Medical Society of the State of New York, i. 43
Action of the bromide of potassium on the nervous system, i. 269
Acute inflammatory rheumatism, acute pleuritis, by Prof. R. S. Newton, i. 247
Acute inflammatory rheumatism, treatment of, i. 203
Affections of the heart, Cereus Grandiflora in, ii. 231
Allopathic code of medical ethics, ii. 38
American Eclecticism—its history, utility and destiny, by J. W. Johnson, M. D., ii. 261
American improved gas light, ii. 235
Ammonia, muriate of in neuralgia, i. 143
Anæsthesia, local, i. 75
Anæsthetic properties of the bichloride of carbon, i. 122
Anatomy and some of the surgical diseases of the urethra, by Prof. E. Freeman, ii. 20, 54, 121
Anniversary of the Brooklyn Academy of Medicine, ii. 208
Annual meeting of State Eclectic medical societies, ii. 278
Antidote for strychnia, ii. 46
An advertising bureau, ii. 189
An anecephalic monster, by Dr. S. C. Church, ii. 165
A new book, ii. 37
A word in season, i. 132
A word of advice to medical students, ii. 79
A singular case of strangulated inguinal hernia, by Prof. E. Freeman, ii. 161
Asiatic cholera, i. 1
Asthma, ii. 239
Atrophy and degeneration of the muscles of the upper and lower extremity from disease of the spinal cord, i. 272

Beef tea, how to make nutritious, ii. 270
Board of Health, i. 129

Boston District Eclectic Medical Society, ... i. 138
Brooklyn Academy of Medicine, ... i. 48
Brooklyn Academy of Medicine, anniversary of, ... ii. 141, 208

Cancerous tumors, injection of acetic acid, ... ii. 261
Cannabis Indica as an antispasmodic, ... ii. 275
Carbon, by Prof. J. M. Sanders, ... ii. 192
Case of poisoning by arsenic, ... ii. 155
Case of President Harrison, ... i. 25
Cases in practice, by Dr. O. E. Newton, ... i. 23
Central Indiana Eclectic Medical Society, ... i. 48
Cereus Grandiflora in affections of the heart, ... ii. 231
Change of title, ... i. 83
Changing the Faculty of Paris, ... ii. 288
Chickering's grand pianos, ... i. 235
Chlorate of quinia, ... i. 121
Chlorate of potash in phagedœna, ... ii. 232
Cholera Asiatica, by Prof. E. Freeman, ... i. 19
Cholera, ... ii. 48
Cholera in Memphis, ... i. 288
Cholera as witnessed in Cincinnati in 1849–50, ... i. 127
Cholera, portability and communicability of, ... ii. 180
Cholera mortality under the "rule" . . . . i. 134
Cholera conference at Constantinople, report of, ... i. 211
Cholera and the Board of Health, resolutions concerning, ... i. 191
Cholera prize of twenty thousand dollars, ... ii. 288
Cholera Infantum, by Prof. R. S. Newton, ... i. 55
Chronic dysentery, treatment of, ... ii. 218
Citrate of soda in diabetes, ... ii. 32
Clinical instruction, New York *vs.* Paris and London, ... i. 177
Clinical inquiries into the influence of the nervous system on the production and prevention of dropsies, etc., ... i. 227
Code of ethics of the Eclectic Medical Society of the State of New York, i. 282
Common tape-worm, successful treatment for, ... i. 65
Comparative frequency and varieties of hernia, ... ii. 79
Connecticut Reform Medical Association, ... ii. 45, 96
Constituents of Veratrum Viride, ... i. 30
Constitution and by-laws of the Eclectic Medical Society of the State of New York, ... i. 226
Contagious diseases, nature of the poison of, ... ii. 17
Contribution to the history of strangulated femoral hernia, by Dr. J. S. Prettyman, ... i. 61
Correction, ... i. 87
Croup, ... ii. 252
Cycloid piano at the Exposition Universelle, ... ii. 279

Decker pianos, ... i. 133
Delirium tremens, treatment of by capsicum, ... i. 120

Demand for Eclectic physicians, i. 178
Deodorization and disinfection, i. 29
Dermoid ovarian tumor, escaping per rectum, i. 217
Diabetes, citrate of soda in, ii. 32
Diphtheria, its causes and treatment, by Dr. O. E. Newton, i. 114
Directions for restoring the apparently dead, i. 223
Diseases of the throat, oil of Erigeron in, i. 25
Doctored to death, i. 288
Donations to the Eclectic Medical Dispensary of the City of New York, ii. 192

Eclecticism, ii. 131, 186
Eclectic medicine, position and wants of, i. 13
Eclectic Medical Association of Indiana, i. 43, ii. 96
" " " Connecticut, i. 46
Eclectic Medical College of the City of New York, i. 83, 34, 276, ii. 183
Eclectic Medical Dispensary, i. 183, 278
  donations to, ii. 192
  list of attending and consulting physicians to, ii. 192
Eclectic Medical Review, ii. 276
Eclectic Medical Societies, by Prof. Hadley, i. 19
Eclectic Medical Society of the City of New York, i. 34, 47, 83, 276, ii. 141
" " " State of New York, i. 45, 84, ii. 189, 277, 283
" " " State of Massachusetts, i. 45, ii. 90, 137
" " " State of Indiana,. i. 46, 92
" " " State of Maine, i. 45, 190
" " " State of Ohio, i. 45, 92
" " " State of Pennsylvania, i. 46
" " " State of Vermont i. 92
" " " State of Connecticut, i. 93
"Eclectic Remedies," "Concentrated Medicines," i. 274
Electrolysis of metals, ii. 81
Elimination in cholera, ii. 228
Empiricism *vs.* rationalism, ii. 274
Enuresis, by Dr. C. E. Miles, i. 104
Epidemic, progress of, i. 180, 233
Epidemics and contagion and their preventive, by Prof. J. M. Sanders, i. 49
Erigeron, oil of, in diseases of the throat, i. 25
" gonorrhœa, i. 122
Erysipelas, sulphite of soda in, ii. 192, 230
Ether spray in strangulated hernia, ii. 77
Excision of the tongue, i. 71

Favorite remedies and recipes, by Prof. Allen, ii. 15, 126
First commencement of the Eclectic Medical College of the City of New York, ii. 167
Florence sewing machine, i. 87

Garrett, Miss. L. S. A., ii. 46

Gelsemin in tetanus, i. 79
Geum Virginianum in dysentery, ii. 47
Gonorrhœa, a new remedy in, i. 122
Gonorrhœa and gleet, novel treatment of, i. 171
Gunshot wound, remarkable case of, ii. 134

"Hair-dyes," "restoratives," etc., i. 378
Hay fever or hay cold, i. 143
Health and holiness in Cincinnati, ii. 271
Henshall, Drs. J. G. and J. A., i. 277
Hereditary syphilis, treatment of without mercury, i. 67
Hereditary influence, by Dr. Chas. S. Davis, ii. 67, 113
Hernia, comparative frequency and varieties of, ii. 79
Hernia, strangulated inguinal, ii. 161
Hernia, strangulated femoral, i. 61
Hernia, strangulated, opening the sac in, i. 161

Identity or plurality of syphilitic poisons, by Dr. J. A. Henshall, ii. 60
Ill-smelling feet, i. 218
Infantile mortality in the city, ii. 40
Influence of sleep on the appetite and reparative powers, ii. 75
Insufflation of medicated powders into the urethra, ii. 224
Instruction, clinical, i. 177
Interference of Nurses, i. 39
International medical congress, ii. 129
Introductory lecture, by Prof. J. M. Sanders, ii. 1
Invalids,—ventilation for, ii 271
Iodine in the treatment of uterine leucorrhœa, i. 216
"Irregulars" *versus* "regulars," ii. 187
Is mercury poisonous? ii. 33

Keckeler, Prof., and his system of the human temperaments, i. 287
King's chronic diseases, ii. 144

Laryngitis, by Prof. R. S. Newton, ii. 245
List of attending and consulting physicians to the New York Eclectic
  Medical Dispensary, ii. 192
Local anæsthesia, i. 75
Long umbilical cords a source of danger to the life of the fœtus, ii. 32

Macrotys racemosa, therapeutic action of, i. 199
Medical attainments *vs.* social talent, ii. 47
Medical education, i. 228
Medical education of women, ii. 233
Medical fees, i. 131
Medical manners, advice to young men, ii. 27
Medical specialties and specialists, by Prof. Allen, i. 153
Medical students, a word of advice to, ii. 79

Menorrhagia, i. 80
Mercury, is it poisonous? ii. 33
Mercury, antimony, lead and arsenic as permanent, irritating causes of disease, by Prof. E. Freeman, i. 104
Metals, electrolysis of, ii. 81
Michigan State University, ii. 86
Mild zinc ointment, i. 96
Milk leg—phlegmasia dolens, t. 207
Mode of distinguishing between nervous idiopathic albuminuria and the albuminuria of diseased kidneys, i. 222
Modern synthetic chemistry, by Prof. J. M. Sanders, ii. 145
Mortality among the lying-in women in the Parisian hospitals, i. 225
Mott memorial library, ii. 36
Mucous laryngitis, ii. 245
Muriate of ammonia in neuralgia, i. 143
Music and hygiene, health and disease, i. 183

Narceine, physiological action of, i. 223
National Eclectic Medical Association, ii. 85
Nature of the poison of contagious diseases, ii. 217
Neuralgia, muriate of ammonia in, i. 143
New medicine, progress of, ii. 49
New and ready method of producing local anæsthesia, i. 75
New remedies, by Prof. J. M. Sanders, i. 97, 145, 193
New remedy in gonorrhœa, i. 122
New volume, ii. 279
New York Academy of Medicine—an advertising bureau, ii. 189
Nitrous oxide gas in surgical operations, i. 31
Novel treatment of gonorrhœa and gleet, i. 171
Nurses, interference of, ii. 139

Obituary notices:
    Gibbs, R. W., M.D., ii. 48
    Powell, Prof. W. Byrd, i. 48
    Taylor, James D., i. 96
Object and plan of the Review, i. 33
Oil of erigeron in diseases of the throat, i. 25
Oil of erigeron in gonorrhœa, i. 122
Oil of petroleum in treatment of scabies, ii. 223
Old and new chemistry, by Prof. J. M. Sanders, ii. 97
Opening the sac in strangulated hernia, by Prof. E. Freeman, i. 161
Our text books, i. 233
Outrage on a cholera patient, i. 181
Oxygen, therapeutic uses of, i. 271

Paralysis produced by phosphorus, ii. 31
Past and present schools of Paris, ii. 181
Pelvic bones, separation of in parturition, i. 26

Penetrating wounds of the thorax, treatment of, ... i. 22
Phagedœna, chlorate of potash in, ... ii. 232
Phlegmasia dolens or milk leg, by Dr. G. M. Langdon, . . . i. 207
Physiological action of Narceine, ... i. 223
Physiological incest, by Prof. W. Byrd Powell, ... ii. 241
Pleuritis, acute, treatment of, ... i. 247
Poisons, by Prof. Hadley, ... ii. 199
Poison of contagious diseases, nature of, ... ii. 217
Poisoning by arsenic, case of, ... ii. 155
Portability and communicability of cholera, ... ii. 180
Position and wants of Eclectic Medicine, by Prof. Allen, . . i. 13
Potassii Bromidi, action of on the nervous system, ... i. 269
Poultices, use and abuse of, ... i. 118
Practical hints on the prevalent fevers of the West, and their treatment,
by Prof. C. T. Hart, ... i. 241
Professional, ... i. 133
Progress, ... ii. 185
Progress of the Eclectic practice, ... ii. 232
Progress of new medicine, ... ii. 49
Progress of the epidemic, ... i. 233
Progressive medicine, ... i. 78
Pseudo-membranous laryngitis, ... ii. 252
Public health, ... ii. 238
Public health, the death rate in different cities, ... ii. 79
Pulsatilla, by Dr. A. P. Parsons, ... ii. 205

Quinia, chlorate of, ... i. 218
Quinine a constituent of the body, ... i. 121

Red rubber dental plates and their effects upon the system, by Dr.
Barker, ... i. 167
Reed instruments, ... i. 249
Beform in hospitals necessary, ... ii. 84
Relations existing between the sense of touch, the sense of temperature,
and the sense of pain, ... i. 124
Relation between cholera and the diarrhœa which accompanies it, and
the treatment of the latter disease, ... ii. 218
Remarkable case of gunshot wound, ... ii. 134
Report of the Cholera Conference at Constantinople, ... i. 211
Resolutions concerning cholera, and the Board of Health, . . . i. 191
Results of the operation of complete excision of the astragalus per-
formed by British surgeons, ... ii. 209
Revaccination, ... ii. 173
Reviews and bibliographical Notices, . . . i. 41, 42, 88, 136, 139, 188
" " " . . . . . ii. 40, 88, 236, 283
Rheumatic fever, treatment of, ... ii. 215
Sanitary condition of our city, ... i. 86
Sanitary districts of New York City, ... i. 191

Scabies, treatment of by oil of petroleum, ... ii. 223
Scientific martyrdom, ... ii. 46
Second session of the Eclectic Medical College of the City of New York, ii. 278
Senatorial district Eclectic medical societies, ... i. 46, 189, 240
Separation of pelvic bones in parturition, by Dr. A. B. Whitney, . . i. 26
Sequelæ of surgical operations, ... ii. 221
Sleep, influence of on the appetite and reparative powers, . . . ii. 75
Small-pox in London, ... ii. 287
Soda, citrate of in diabetes, ... ii. 32
Soda, sulphite of in erysipelas,. . . . . ii. 192, 230
Solvent treatment of urinary calculi, ... i. 119
State appropriations for charitable purposes, ... ii. 38
State Eclectic medical societies, ... i. 43
Stillingia, ... i. 94
Strangulated femoral hernia, ... i. 61
Strangulated inguinal hernia, a singular case of, ... ii. 161
Strangulated hernia, opening the sac in, ... i. 161
Strychnia, antidote for, ... ii. 46
Sub-mucous laryngitis, ... ii. 246
Successful treatment of common tape-worm, by Dr. O. E. Newton, . i. 65
Sugar-coated preparations, ... ii. 191
Surgical operations, nitrous oxide gas in, ... i. 31
Sympathy between the ear and larynx, ... i. 126
Syme's amputation of the foot, ... i. 272
Syme's Principles and Practice of Surgery, ... i. 277
Syrups of the phosphates of Iron, Quinia and Strychnia, ... ii. 226

Tænia Solium, ... i. 281
Tape-worm, successful treatment of, ... i. 65
Tetanus and gelsemin, ... i. 79
Therapeutic uses of oxygen, ... i. 271
Therapeutic action of the Macrotys Racemosa, by Dr. Smith, M. D., i. 199
Tongue, excision of, ... i. 71
To district Eclectic medical societies, ... i. 186
To Eclectic physicians, a valuable suggestion, ... ii. 35
The body of Jeremy Bentham, ... ii. 143
Transactions of the Brooklyn Academy of Medicine, ... i. 280
Treatment of acute inflammatory rheumatism, by Dr. H. E. Firth, . i. 203
Treatment of chronic dysentery, ... i. 218
Treatment of delirium tremens by capsicum, ... i. 120
Treatment of hereditary syphilis without mercury, ... i. 67
Treatment of penetrating wound of the thorax, ... i. 22
Treatment of rheumatic fever, ... ii. 215

Union Eclectic Medical Society, ... i. 48, 93
Urethra, anatomy and some of the surgical diseases of, . ii. 20, 55, 121
Urinary calculi, solvent treatment of, ... i. 119
Urine in acute rheumatism, ... i. 222

Use and abuse of poultices, ... i. 118
Use of sulphite of lime and soda as remedial agents, . . . ii. 225
Use of sulphite of soda in the treatment of erysipelas, . . . ii. 236
Uterine leucorrhœa, iodine in the treatment of, ... i. 216

Ventilation for invalids, ... ii. 271
Veratrum viride, constituents of, ... i. 30
Vis medicatrix naturæ in diseases of children, ... i. 174

Warning against the simultaneous prescription of chlorate of potash and iodide of potassium, ... ii. 288
Weed sewing machine, ... ii. 280
What is cholera infantum? . . . . i. 55
What is thought of the Eclectic treatment of cholera in Europe, . ii. 37
What is the American Eclectic system of medicine, ... ii. 138
Why American Eclectic physicians refuse to bleed, . . . ii. 90
Winter session, ... i. 182
Women, medical education of, ... ii. 233

AMERICAN

ECLECTIC MEDICAL REVIEW;

A Monthly Record of Medicine

AND

THE COLLATERAL SCIENCES.

Vol. II. DECEMBER, 1866. No. 7.

ORIGINAL COMMUNICATIONS.

Introductory Lecture, delivered before the Class of 1866-'7 of the New York Eclectic Medical College.

BY PROF. J. MILTON SANDERS, M. D., LL. D.

> "*Doce ut discas.*"
> JUVENAL.

> "If you are anxious to learn, employ yourself in teaching,
> And thus will you yourself be taught."
> HORACE.

It was the custom of the ancients, previous to commencing any great undertaking requiring the aid of the intellect, to offer up prayers and sacrifices to Minerva, *the Goddess of Wisdom.* The custom was a good one, but, from the tenor of some Introductory Lectures I have lately read, I am impressed with the conviction, that these propitiatory offerings have sadly gone into disuse. It is well, upon entering upon any enterprise requiring the exertion of the Intellectual Faculties, that we should propitiate the Goddess of Wisdom—if not by offering up prayers and sacrifices, by at least bringing to our aid all the industry and perseverance we may possess, and also a *will* which needs must be indomitable—which must not be appalled by the most adverse obstacles, nor retarded by the most apparently insurmountable difficulties. With such sacrifices as these we will find that in the lexicon of *age*, as well as in that of youth, there is no such word as *Fail.* It is true that during a prolonged lifetime we can gain but little knowledge at best; but this should not deter us from striving after that little, for he is the happiest who possesses within himself the most materials for thought and reflection—those materials which can ennoble the soul and expand the faculties, and contribute towards their progress, when they shall have reached that upper realm where their capacity of expansion will be infinitely greater.

Sallust says:—"He only may be said to live, and enjoy his being, who is engaged in some praiseworthy pursuit, or acquires a name by some illustrious action or useful art."

In this sentence the old author has embodied the wisdom of a lifetime. In order that you may live, enjoy your being, and that posterity may know that you *have* lived, it is necessary that you should drink at the Fount of Knowledge. If you possess ambition (and it is a laudable faculty, if not abused), you can gratify it only by the possession of that lever whose power can elevate and remove the greatest impediments which may obstruct your path. The ignorant are susceptible of progress, but they are incapable of exerting among men that influence which is required in order to gain esteem and admiration. The latter can only be won from mankind by that force of character derived from the possession of knowledge; for the distinction between one man and another—between the great man and the fool—lies generally in the relative amount of knowledge possessed by the one over the other.

But I did not come before you to lecture you upon the subject of ambition, or upon the faculty of winning your way in the world. These will be the problems of your after lives —he who improves the present, will find the road freest of obstacles in the future. You will find, gentlemen, that in early manhood we garner up the materials to contribute to the strength of after life. Old age, without this initiatory preparation, is bereft of its glory and its power. The wisdom that all men respect in it you will be deprived of.

Feebleness will take the seat of power—irascibility and peevishness will be substituted for dispassionate reflection—decrepitude and mental infirmity, for that wisdom which is the glory of the aged; and the sceptre you ought then to wield with such potency among your juniors will fall feeble and powerless from your hands. Then, while the opportunity is before you, discard it not, for any neglect now will be a draft upon the future, payable at old age, in the deepest regrets, the bitterest tears of repentance.

Medicine offers as fine a field for the exhibition of your ambition and usefulness as any other branch of knowledge you could devote yourselves to. Outside of medicine proper, its furthermost boundaries comprise several collateral sciences the knowledge of which will put you in possession of a lever as powerful as that of Archimedes. I was just upon the eve of pronouncing chemistry one of those collateral sciences, but at the present day this science is really at the bottom, forming one of the foundation stones of the medical superstructure. Without it, the physician at the present day would be scarcely considered a half-read man. He would be ignorant of the composition of the remedies he administers. He would be ignorant of the changes constantly ensuing within the system during health and disease. He would be ignorant of all the vital processes, and of those actions and reactions which sustain life, and bring about death. He would not only be ignorant of the wonderful reaction ensuing within vegetable and animal cells—in which the thousand remedies he uses are formed, and in which the constantly ensuing reactions that sustain life are maintained—but he would be equally ignorant of those resources which conquer disease, and replace upon the cheek, pallid with disordered action, the bloom of health and of beauty.

Not to be cognizant of the important truths of chemistry, therefore, would be to rank himself as the compeer of those charlatans whose advertisements of *cure-alls* fill the columns of our daily papers.

"But what is modern chemistry, that it should merit the attention of the enlightened physician?" I think I hear some one of you inquire. To answer this question as it seriously deserves, would scarce confine me within the limits of a folio volume; for, within the present century, it has risen from an infant in the cradle, to the proportions of a full-grown adult. From a mere play of futile experiments, well calculated to please the curious, it has risen to a chain of philosophical inductions, linking the whole universe—stretching to the furthermost boundaries of space where an atom of matter exists, and involving within its apodicties every action and reaction, every movement, every thought and emotion, every sensation, that exists. Along with mathematics we may call chemistry the science of sciences, for its astuteness of demonstration has really involved the most recondite of all natural phenomena; and not only do they implicate all objective and percipient entities, but they bind and weigh with mathematical precision the most subjective and emotive parts of intellect, taking cognizance of its phases of intensity with the exactness of the balance, and giving even passion itself a numerical value. Let metaphysicians wrangle their dialectics with all the refinement they may bring to their aid, but it is to the chemical laws they must ultimately turn for the rational explanation of the true wearing of the soul upon its tenement of clay. The poet's flight in the regions of refined sentiment—the profound exertions of the philosopher's intellect as he eliminates truth that will never perish—the subtle workings of the inventor's thoughts, as he evokes from chaos the ideas of symmetry and adaptability, and generalizes them into beautiful mechanical perfection—all of these recondite and subtle inspirations of thought, chemistry has taught us are but the creatures of her laws, and that they are all susceptible of measurement in equivalents, as easily as the ponderable matter about us. To *weigh* thought may be deemed the most transcendental effort of imagination itself, but the quantity of matter contained in the urine, and its quality, we regard as an exponent of the quantity of thoughts and emotions. Certain metamorphosed constituents of the cerebral mass, we regard as representatives of certain mental exertions, and the weight of these, or their amount excreted in the urine, gives us the amount of cerebral action necessary to throw off these constituents from its mass. The amount of certain mental work consumed in study, is demonstrable in grains of phosphates excreted in the urine; and the severity of this work, or that of any kind of cerebral paroxysms, or intense mental suffering, or any kind of emotional activity, are measured accurately by the balance, and may be stated in grains; or the *force* necessary to eliminate a certain amount of thought, may be compared accurately with the amount of force requisite to raise a certain weight a certain height. The experiments of modern chemistry, you will perceive, have trenched within "the dome of thought, the palace of the soul," and with its numerical exactness, has taken cognizance of the true value of thought. A sudden burst of passion is measured in grains metamorphosed from the brain during its prevalence. Grief may be estimated by weight, and its paroxysms are measured with the greatest precision. Insanity involves the cerebral metamorphosis, and the chemist will predict its duration, its intensity, and its consumption of brain and nerve force, without ever seeing the patient.

Why, gentlemen, unless you have had actual experience in chemical manipulation, you will scarce conceive the delicacy of the reagents used in its investigations. Suppose you wish to test for the presence of sugar in diabetes. Make a solution of the sugar, or glucose, add a little of the solution of sulphate of copper, and then some caustic potash. Instantly the solution will become red, even if there be present only the *ten-millionth of a grain* of the sugar. But this is rough, compared with the following, which I will adduce as an evidence of the delicacy of chemical examinations. Dissolve one grain of silver in a small quantity of pure nitric acid, and then pour this solution of silver into 3,255 gallons of water, or about 80 barrels. When well diffused through the mass, put one drop of this water upon a plate of glass, and touch it with a glass rod previously dipped into pure hydrochloric acid. The drop of solution will become turbid or milky, indicating the presence of silver, although there is contained in that drop of solution only the *two-hundred-millionth of a grain of silver.* A particle of silver which is only the 200,000,000th of a grain in weight is very minute, but still by means of our reagents you see we can make it appear to the eye quite perceptibly. And this is true with all matter, although, in many cases, not with the great delicacy pertaining to silver.

If thoughts and emotions may be weighed and measured in regard to their intensity, then, wherefore not measure and weigh the Imponderables?

Heat, Light, Electricity and Magnetism, were termed the Imponderables, because it was impossible to apply weight to them. They were thought beyond the cognizance of weight. They were regarded as "fluids" so higly attenuated that no investigation could reach them, at least so far as to arrive at any numerical idea of their relative values. Force was said to be a something and then a nothing—at one time it was an entity, at another a nonentity—now a thing of vast moment, capable of raising immense weights, and repelling or retarding enormous bodies; and the next moment underwent total annihilation, and was lost forever! All of these curious conceptions regarding force, and its coördinates, heat, light, electricity and magnetism, are things of the past. They have been brushed away by the same demonstrable investigations which characterize chemistry from most other sciences; and we now have a true and rational idea of the nature of these "Imponderables." We first ascertain that they are reciprocal entities, that the one may be converted into the other. We find that a certain equivalent of the one may be converted into just one equivalent of the other, and that this quantity of either may be measured by a certain quantity of force, and that, after all, they are only modifications of force, or momentum. In the beginning, force, or momentum, was all that existed, and this, in connection with matter, gave birth to heat, light, electricity, magnetism, and chemical affinity. I do not propose to tire you with any prolix theories or hypotheses either in Cosmogony or Cosmology: but simply to state the idea that, as these agents are convertible, there was no necessity for the creation of but one: and, as force would appear the most necessary in the begining I have given it the precedence. Not wishing to go into anything in this lecture which may trench upon hypothesis, I will confine myself to the simple enunciation, that all of these modifications of force most have originally been derived from the sun. We have but one force upon our earth which could not be derived from the sun. This force is that of the tides and its derivations. There is nothing of a scientific nature which has attracted so much attention of late as the subject of these Imponderables. Instead of being *fluids* not susceptible of weight, they are regarded rather as *forces*, their phenomena being due to motions excited in ponderable matter. As it is necessary that you should understand the nature of these forces, it will not be irrelevant to say a few words upon this great subject, the highest that can come under the cognizance of the human intellect. The rays of heat and light emanating from the sun, represent all the motion and life upon this earth, with the single exception of those of the tides. Vegetation is the medium through which we receive this force—this life. The rays of heat and light, as they impinge upon its foliage, are at once absorbed, and, we may say, organized, and form a portion of its structure. Each increment of matter that the plant stores away represents a certain amount of organized sunshine—so much dormant force. The tea, coffee, spices, and drugs we import from the hot East Indies, represent an amount of the intense heat of the sun of those tropical regions, which was poured down from it during the time of the building up of the plants which produced those principles. The plants caught the sun's fierce rays as they were showered upon their foliage, and, absorbing them, organized them into a portion of their own substance. This heat, therefore, as it entered into the organism of the plant, was not annihilated. as we would at first thought suppose. It lies there, as it were, in a dormant state, but still replete with life and vigor, and ready at the appropriate time to exert the same force that it did originally in the building up of the plant.

The quinine you give to allay fever—the morphine, the strichnine, the brucine, the aconitine, the salicine, and in fact all of those beautiful crystals you so much depend upon to mitigate and allay disease, are literally, and not figuratively, crystallized sunshine. It was the sunshine that brought them into being—that gave to them their beautiful geometrical forms, and imparted to them their powerful properties. The force which lies within your muscles is not generated by your own volition, but came originally from the sun. It was derived immediately from the vegetable world, and mediately from the flesh of the animals you have eaten. Hence we find that as we cannot create anything, so we cannot annihilate anything. You may set fire to a piece of wood, and, in common parlance, burn it up, but, after all, we have only changed its form, or the arrangement of the atoms of which it was composed; still, we have not destroyed it. If the gases emanating from it, the uncombined carbon in the form of smoke, and the ashes left behind, are all weighed, we will find that really nothing has been lost, but that every atom forming the wood still exists, but recombined into less complex substances. We have then only accomplished a metamorphosis, and not an annihilation —we have only destroyed the *form* of the wood, but not its substance. Now, it requires a very powerful force to unite these atoms of the wood together so firmly as to form a vegetable fibre. This we are aware of from the fact, that an enormous force is given out upon the separation of those atoms. Do you not observe that considerable light and heat are eliminated upon applying heat to this piece of wood? This light and heat represent the force derived from the sun—it is the identical light and heat originally derived from the sun, and represents so much force. If you wish to comprehend this more clearly, apply this heat to the steam-engine, and you will have an exemplification of it; or apply the *light* to the production of chemical affinity, and you may form by it a compound whose dissolution may blow you up. All of this force must be derived from the sun, for the plant cannot create force any more than we. In giving out this heat and light, the plant must emit a large quantity of hydrogen gas. Now, one pound of hydrogen, in combining with eight pounds of oxygen, gives out a force sufficient to raise a weight of nine thousand pounds one mile high. This enormous force is stored away in the plant with the fixation of each pound of hydrogen; and he who ingests this amount of hydrogen as a constituent of his food, must necessarily store away, or appropriate, a force sufficient to raise a weight of nine thousand pounds one mile high. Hence, everything which lives, and moves, and gives out force, either as motive or mental, must have originally derived this force from the rays of the sun. The power you perceive developed every place around you, by aid of that greatest servant of man, the steam-engine, is not the power of the present day, but that derived from the sun in ages past. In those times the rays of the sun were doubtless more fierce and powerful than they are now. The vegetation whose debris form the strata of our coal-fields, was then flourishing with a luxuriance perhaps not paralleled at the present time. They absorbed and stored away the enormous force derived from the fiery rays of that early sun, and we, millions of years after they flourished, now enjoy their light and heat, or their power.

As all motive force is derived from the sun, so is all emotive force. This I have alluded to, but it supplies the links necessary to connect the wonderful chain of earthly phenomena into one beautiful whole—linking together, by the evolutions of the same force, the operations of mind and matter.

I have stated that the Imponderables are mutually convertible, and that a certain definite amount of one will represent that of another. This you should understand. If, for instance, it requires one equivalent of zinc (or 33 grains) dissolved in acid to evolve a certain amount of electricity, the electricity generated will decompose just one equivalent, or nine grains of water. Thus, one equivalent of one kind of element contains the same force as one equivalent of another kind, although it requires very different weights to represent equivalents of different elements. This idea may be more clearly stated by saying, that six grains of carbon contain, or are capable of giving out, as much force as 108 grains of silver, or 122 grains of antimony. Thirty-three grains of zinc. in being dissolved in acid, give out a force which will be sufficient to liberate thirty-six grains of chlorine from its combinations. This force may represent itself as electricity, or as chemical affinity; or it may assume that of magnetism. If the electricity passed into the electrolyte water, sufficient to decompose one equivalent of it—nine grains—be conveyed around a piece of soft iron. the latter is converted into a magnet, and the quantity of force this magnet will develop, or the weight it will lift, will represent one equivalent of force. If the gases, oxygen and hydrogen, which are evolved from the equivalent of water. decomposed by the equivalent of electricity, be exploded, they will give out just the same amount of heat that that amount of electricity would give out, were it passed through a fine platinum wire. Thus, work it as we may, we find that all of these modifications of force represent each other in definite quantities. We find, likewise, that they may all be accurately measured as force, and their value stated in foot-pounds.

As these forces are emanating from the sun in enormous quantities at every moment of time, the inquiry naturally presents itself to us, whether this force will not in time be exhausted? Now, we know that the utmost limit of temperature evolved by chemical action, is only about 4,000° F.. while the temperature of the sun's surface is 55,000° greater than it is at the equator of our earth at noon. This heat is equivalent to a force exerted by four hundred and fourteen millions of millions of horse-power; but this earth only receives the one two-thousand, three-hundred-millionth of this force. This enormous force which our planet sustains is consumed in producing the motion of the ocean's waves, and of the atmosphere; and in the production of vegetable forms—and is the source, in fact, of almost every motion upon this earth.

In regard to the manner in which the heat, which is so vital to us. is maintained in the sun. there can be but one conclusion. It must be derived from the conversion of momentum into heat and light. These are derived from the impinging upon the sun's surface of immense numbers of asteroids. This is the only method, including chemical action, by which heat could be generated sufficient to account for that of the sun. We know that, if the motion of a body be retarded, its momentum is converted into heat. You witness this every day in the retarding of, and bringing to rest, the train upon the railroad. The brakes being applied to the wheels, as the motion of the train is retarded, fire flies from the brakes, often in such quantity as to set fire to the woodwork around. This fire existed a moment before in the form of force or momentum. If, therefore, a large body, moving with great velocity, be suddenly retarded and brought to rest, its momentum is converted into heat, the amount of the latter being in a ratio to the weight of the body and its velocity. This source of heat is therefore infinite, while that derived from chemical action is limited, and that to very narrow bounds. If this earth were suddenly arrested in its orbit, its weight and velocity being known, a heat would thereby be caused sufficient to burn up fourteen such sized globes of coal; and if this earth were then to fall into the sun—as it would inevitably do—a heat would be generated infinitely greater. The velocity of this earth upon reaching the sun, would be at least three hundred and eighty-four miles a second, and the concussion would raise the sun's temperature by eighty millions of degrees. But such is the enormous amount of heat given off by the sun, that to sustain this heat, it would require the frequent impingement of enormous bodies upon its surface. These bodies should weigh per minute at least 132 billions of tons. Hence we perceive that all forces are derived from the sun, issuing from that body in the form of light and heat, but readily convertible into other forces at any moment. These forces play a very important part, not only upon matter without our bodies, but upon that within us, as we have seen.

To light we may attribute vast and subtle changes, which we little suspected a few years ago. Everything upon which light falls undergoes a change. Photography has initiated us into this discovery. In many cases we possess the means of bringing out, or "developing," as it is termed, these changes, and thus forming upon the tablet a pictorial delineation of the object before it. But it is not required that the surface of a body shall be especially prepared by chemical means for this purpose. Any surface is susceptible of taking an image of an object placed before it, and could no doubt be brought out pictorially to our view by adopting the necessary reagents for that purpose. Could these be discovered (and they will undoubtedly be), the very walls of our apartments would reveal in pictorial records the scenes that light have impressed upon them; and, as the illustrious Prof. Draper remarks, the tombs of the Egyptians might be made to reveal the dusky forms of those who occupied them last, as they laid to rest the remains of their kings.

We are indeed surrounded with wonders, and it is but a few years ago that these wonders were suspected. A variety of subtle agents are continually at work effecting the most important and vital changes. With every flash of lightning, the ambient air is revivified and the elements of disease are being replaced by those of health and vitality; for each flash of lightning imparts to the oxygen, for hundreds of yards surrounding its passage, a chemical vigor it did not possess before. When thus ozonized, it is gifted with the force to decompose the attenuated matter of epidemics, and thus to preserve human life. But this is not all. Gifted with those more intense chemical affinities, it combines with nitrogen, forming nitric acid. This is carried to the earth by the rain, and by this means supplies vegetation with a quantity of nitrogen it could not so easily acquire by any other means.

There are potent agents at work, which, although silent and not perceptible to our senses, are none the less wonderful. Light itself is one of these. Every substance upon which it falls undergoes at the place of contact, if not throughout its mass, a series of molecular changes which endure during the existence of the body. Examine the photographer's plate after the light has impinged upon it. No change is perceptible to the eye, and it looks as blank and undisturbed as it did before: still wonderful changes have ensued by the falling of the rays of light upon that surface. Years after this, if the proper reagent is flowed upon it, a picture will start into being, and startle you with the delicacy and beauty of its details. This picture existed in that film upon the metal surface in all of its perfection, but coiled up there so latent that no human sense could detect it; and would have lain there for an indefinite length of time unsuspected, had not proper reagents been resorted to in order to evoke it. It is thus with any surface upon which a ray of light falls. A molecular change is effected by the light, and the dormant image of any object which these rays may depict thereon, is forever stamped in the atoms of that substance, and may, by the aid of the proper reagents, be made visible to our senses. How startling is the thought, that every act we commit is forever recorded by that subtle agent, light! Ay, that the slightest thought or emotion is stamped upon the organism, and bears its impress with us to the grave! I say that every act is recorded by light. If these acts be committed within the secret walls of our apartments, the walls tell the tale:—if they are in the open day they are equally recorded, for the rays of light which have impinged upon us bear away with them forever into space the enduring record of our acts, and millions of years hence may convey to some astronomer in a distant planet, a pictorial record of them. Even at this moment some philosopher in a far distant planet—too far off for us to rightly comprehend the extent of the vast void which intervenes between it and us—may be gazing at the rays of light which left the Crucifixion, and thus be contemplating at this moment that solemn scene.

We must not suppose that we can escape this subtle agent, light, for shut it out of your apartments as you may, it is there yet in all its potency. Recollect that light is but the coördinate of heat, and that images are as readily made by the latter as by light. These calorific images may, one of these days, reveal in vivid pictures the secret doings of us all; for although light, as we view it, does appear to be the potent principle which causes the molecular disturbance that results in the production of a picture, the latter is really due to a series of rays that possess neither light nor heat, but which accompany both, and are subject to the same law of refraction and reflection as its associates.

Gentlemen, in a rather erratic manner, I have striven to impart to you as vivid a conception of the nature of the Imponderables, and their correlates, force and momentum, as could be done in so brief a space as is allowed me in this lecture. At a future time I will dwell upon the subject again, for the Imponderables, as I still term them, have risen from very small importance in medicine to a subject of vital moment. They are connected with our very being; they are intimately woven into the texture of our nature, and are implicated in every vital movement, in every thought, and in every emotion. Without their coöperation all matter, now so replete with life and activity, would be dead—all order would be supplanted by chaos, and the wise ordinances which made this sphere an universal pæan of harmony and beauty, would exist no more.

Gentlemen, I feel that I cannot close these remarks without referring to the irreparable loss Eclecticism has sustained in the demise of one of her most learned and talented advocates. I refer to the late PROF. W. BYRD POWELL. In his death, not only has Eclecticism lost one of her most earnest, active, and talented members; but science in general, and especially that in relation to the cerebral powers, has met with a loss which ages may not be enabled to supply. But he has lived his allotted time upon this contracted sphere, and, taking wings, has left its narrow confines for fields of progress more boundless, and more in harmony with his mental advancement upon this earth. That his great intellect is now progressing onward to higher spheres of knowledge there is not a doubt, and it will continue to soar onward and upward until it reaches the brighest realm, and is fitted to be in the presence of the GREAT SUPREME.

Favorite Remedies and Recipes.

BY PAUL W. ALLEN, M. D.,

Prof. of Theory and Practice of Medicine in the Eclectic Medical College of the City of New York.

PERHAPS we cannot do a more useful service to the readers of the Review, than to present a few papers upon the topics suggested by the title of this article.

First of all, a remedy must be efficient. The practical physician ever has in view the certainty of action of his remedy, as a most important consideration.

Again: It is highly desirable that medicines should not be too bulky; especially such medicines as we wish personally to dispense from the pocket-case, or medicine trunk. To the physician in city practice, who never uses a medicine trunk, it is no small recommendation that a medicine is concentrated; and patients ever have a wonderful predilection for those which do not require to be given in large doses.

Lastly: We enter a special plea for pleasant medicines. There has been a wonderful change in public sentiment, in this regard, within the last ten years. It has been our fortune to prescribe in many families who have previously employed homœopathic physicians; and by such families, and by others, we have often been complimented upon the palatable character of our remedies. An extensive observation, with special reference to this subject, has entirely convinced us that very many patients, including a large majority of wealthy and educated persons, will not take unpleasant medicines for any considerable time. The physician of pleasant medicines is the popular physician, if he be only reasonably successful. There are a few prominent and most excellent remedies which cannot be made pleasant; but if pharmaceutists and physicians would devote special attention to this subject, almost every medicinal agent could be presented in some form comparatively agreeable. Besides, our medicines will be given much more punctually and faithfully, if they are thus presented; and the success of our remedies is thus far better secured. Nor is this all, for it seems to us that no physician has a moral right to give a nauseous dose to his patient, when, by a little care, he can make it pleasant and acceptable.

Permit us to suggest that physicians can be very useful to each other, in this respect, in their consultations. We have ever found our professional brethren much pleased with suggestions as to methods of making their mixtures more palatable, and with new and pleasant recipes; so much so, that for a few years past, we have always made it a rule, in our numerous consultations, to suggest at least one pleasant and efficient remedy,—either for the case prescribed for, or some other recipe which we have supposed would be valuable to the physician, in the course of his varied professional duties. We must say that, generally, medical men have generously responded to our kindness, by presenting us with new, efficient, and desirable prescriptions. The only precaution we have found necessary is this: to definitely understand whether the physician designs the recipe for us alone, or whether he gives it to us with the understanding that we may make it generally known. Both principle and courtesy imperatively require that every physician should be strictly conscientious and reliable in this respect.

We will devote the remainder of this brief paper to a few favorite remedies and recipes, belonging to the class of—

APERIENTS AND CATHARTICS.

No. 1.—*Compound Powder of Leptandrin and Liquorice.* Take of Leptandrin, one drachm; of pulverized Liquorice Root, one half drachm. Triturate the leptandrin to a fine powder, add the liquorice, and triturate together until thoroughly mixed.

The design of the above very simple formula is to secure a nice preparation of leptandrin, for permanent use. The liquorice seems to have no attraction for atmospheric moisture, and so separates the particles of leptandrin that the compound powder forms a very nice preparation. It can be kept for months without becoming sticky and dauby, and without forming into hardened lumps, like the clear leptandrin. It is much pleasanter to the taste—very palatable in fact; and if left in powders for several days, is scarcely at all liable to become moist, or to stick to the papers.

The bulk of one drachm of leptandrin, and of one-half drachm of liquorice, is nearly the same; so that the practitioner, in dealing out this compound powder from his pocket-case, will make the powders just twice as large as he would if they were clear leptandrin.

We will suggest to the practitioner that, whenever he opens a fresh bottle of leptandrin, he should see that it is provided with a tightly fitting cork. If he will do this, and will prepare the above powder from time to time, he can always prescribe this valuable remedy in its full strength and purity, and in a most agreeable form.

We are convinced that some of our pharmaceutists are preparing a better leptandrin than formerly—less liable to become sticky, and harden into lumps; but, one year since, when we called the attention of the Massachusetts Eclectic Medical Society to the above formula, we found that many of its members had almost entirely discarded the use of a remedy which they otherwise valued very highly, because of its forming a hardened lump in their pocket-case vials, or turning to a dauby mass when prescribed in papers.

No. 2.—Syrup of Blackroot.—Take of Blackroot, (*Leptandra Virginica*,) in coarse powder, one-half pound; put it in a vessel, and add one quart of cold water; place over a slow fire, and let it simmer one hour; strain off the infusion through firm cloth. If there be not a pint of the infusion. add water to make a pint. Heat again, and, as soon as hot, add two pounds of white sugar. When cold, add to each two ounces of the syrup one drachm of the essence of anise.

If the physician prefer, he need not add the essence, but flavor the syrup extemporaneously, as he prescribes it, and as the patients may prefer. Thus, when using this medicine for some time, we can flavor it alternately with anise, sassafras, or wintergreen, or other favorite.

In the above syrup the active properties of one-half pound of *Leptandra Virginica* are incorporated with about three pints of liquid. In other words, we have the strength of 3,840 grains of Blackroot in 384 drachms of syrup, each teaspoonful of the syrup representing the strength of ten grains of the root. Perhaps, in thus making this syrup, we do not get the entire medicinal properties of the Blackroot; but we certainly get most of it, and we know that what we do get is unadulterated and pure.

This syrup may not be an entirely reliable one unless prepared often. The evaporation renders it liable to form a thin sugary coat upon its surface, and if kept for a long time. it is liable to ferment, as it contains no spirit. But we need this medicine mostly in the summer months; and by keeping it in a cool place, and preparing it often, we obviate every difficulty; or, if we wish to keep it for months, we can add a suitable quantity of gin or whiskey. But for children and infants we greatly prefer it without any alcoholic admixture.

The valuable cholagogue, aperient, and tonic properties of the Blackroot are too familiar to the Eclectic physician to require any comment. We especially recognize in this agent an efficacy to restore a natural state of the alvine discharges in diarrhœa and dysentery and difficult dentition, beyond any other remedy. To get the properties of this agent in an agreeable form is what we have all desired. This syrup is quite acceptable to both children and infants. When we are obliged to give leptandrin for any considerable time, as in the protracted diarrhea of difficult dentition, our little patients become nauseated and disgusted with it, and the nurse dislikes to give it. This syrup makes an excellent substitute for it.

Again, if we make powders of leptandrin, it requires considerable time; if we use the syrup, we can in a moment give enough for any required time.

And yet again, if we wish to give the agent each night, and at no other time, which is sometimes an excellent plan, we can at once combine it with any required proportion of the solution of morphia. In such cases we would give as little morphia as is possibly consistent, but what we do give we generally prefer to give at night, and at no other time.

The morphia not only secures sleep and prevents discharges during the night, but it renders the operation of the leptandra less griping, whilst it does not seem in the least to interfere with its cholagogue action.

No. 3.—Mixture of Valerian, Magnesia, and Opium.

℞ Tinct. Valerianæ,	f ℥ j.
Husband's Magnesiæ,	ʒ ij.
Tinct. Opii,	f ʒ ij.
Aquæ Menth. Piperitæ,	f ℥ iij.
Olei Anisi,	♏ xl.

M.

Sig. Shake well, and take one teaspoonful, clear.

A recipe similar to this may be found in a work by the late Professor Horace Green, of this city; but his prescription is made with the ordinary carbonate of magnesia, and contains only one-half as much opium, and he particularly recommends it for flatulence, cardialgia, etc. Doubtless his recipe is an excellent remedy, or at least palliative, for those affections; but we have found the above formula an excellent nervine, antacid, and aperient. It is of particular value when we wish to give an opiate, and not constipate the bowels. Nervous and hysterical cases, and many chronic, incurable affections, require an opiate at night; and it is a decided advantage to them if we can at the same time secure an action of the bowels in the morning. Such persons may use this prescription with much advantage. Its relative aperient and narcotic effects may of course be varied by altering the quantities of the tr. opii and the magnesia. We prefer Husband's magnesia, because it is so much stronger that the mixture is thinner, and therefore much pleasanter. The remedy corrects the secretions of the stomach and bowels, gives a good night's rest, and does not destroy the morning appetite, like most opiate preparations. If there be cough, it also allays that for the night. It is really pleasant to the taste.

No. 4.—Aromatic Fluid Extract of Senna.

℞ Ext. Fluidi Sennæ, (Thayer's,) f ʒ vij.
Tinct. Olei Gaultheriæ, f ʒ j.
M.

For Adult: Sig. Take three teaspoonfuls in a tablespoonful of cold water, and repeat in four hours if it does not operate.

For a Child of one or two years: Sig. Take one teaspoonful in two teaspoonfuls of cold water, and repeat in four hours if it does not operate.

We have always found Thayer's Fluid Extract of Senna a reliable article, and, so far as we could judge, of uniform strength. We have not been so fortunate with this extract when made by other manufacturers, though we presume that some other manufacturers make a reliable article. The above is the most pleasant active cathartic with which we are acquainted, unless it be the sugar-coated pills. It is thorough, and entirely agreeable to both adults and children.

111 East 82d street, Nov. 17, 1866.

[*To be continued.*]

On the Anatomy, and some of the Surgical Diseases of the Urethra.

BY EDWIN FREEMAN, M. D.,

Prof. of Anatomy in the Eclectic Medical College of the City of New York.

The urethra is the excretory passage for the urine, and in the male serves the same purpose in regard to the semen. It is a musculo-membranous canal, beginning at the neck of the bladder and terminating at the meatus urinarius, and from the great variety of diseases to which it is subject, its structure, form, direction, and relation to surrounding parts, should be well understood by every medical man. In a healthy urethra, each part is well adapted to the performance of its particular function, but when a part is deranged, the whole apparatus participates in the trouble. The bladder is a sac similar in structure, and capable of contraction and expansion, situated in the pelvis, in the median line, behind the pubes, for the reception of the urine, from which it is at intervals expelled through the urethra. By this arrangement a constant dribbling of the urine, as it is secreted by the kidneys, is prevented. The direction of the urethra is from the neck of the bladder, forward and downward beneath the symphysis pubis, when it curves slightly upward, embracing the symphysis, and then, rising a little in front of it, enters the groove on the under surface of the corpora cavernosa penis. Its direction further onwards depends on the condition of that organ; continuing forward and upward in the direction of the curve when it is erect, and curving in the opposite direction when the organ is relaxed. It is usually from eight to nine inches long, but the extreme dimensions, according to measurements taken by Whately from forty-eight subjects, were nine inches, six lines; and seven inches, six lines. According to Horne, it is four lines in width, excepting at the orifice, where it is three lines wide; but it varies some in width in different portions, being greatest in the prostatic portion. The different portions of the urethra are named, according to location or structure, prostatic, membranous. and spongy portions. The prostatic, which forms, as it were, a continuation of the bladder and commencement of the urethra, is surrounded by the prostate gland. It is about an inch and a quarter in length, spindle-shaped, wider in the middle than at either end, and wider at the posterior than at the anterior part, where it is continuous with the membranous portion. That portion between the prostate gland and the bulb of the urethra, is the membranous portion. It is about three-fourths of an inch in length upon its upper surface, and half an inch upon its lower surface, the difference being produced by the projection backwards of the bulb. It lies about an inch under the arch of the pubis, from which it is separated by erectile tissue and veins. Its direction is upward and forward, piercing the triangular ligament or deep perineal fascia, the layers of which are separated at that point, so that the most of this portion of the urethra is included between them, a very small portion is situated behind the posterior layer, and both layers are prolonged over the urethra, one forward and the other backward. Below is a triangular space, between it and the rectum, having its base forward and downward, and its apex upward and backward. It is generally in this triangular space that the urethra is divided in the operation for lithotomy. The spongy portion, the longest part of the urethra, usually about six inches in length, extends from the termination of the membranous portion to the meatus urinarius, at its extremity. It is applied to the under surface of the corpora cavernosa, and contained in the corpus spongiosum, in front of the symphysis pubis. It has a uniform diameter of about one-fourth of an inch, being dilated behind in the bulb forming the bulbous portion, and forward within the gland, forming the fossa navicularis. The first portion of the urethra is surrounded by the prostate gland, which, in the erect position of the body, is placed just below and behind the lower border of the pubic symphysis, a distance of three-eighths or five-eighths of an inch intervening between the main body of the prostate and the symphysis, which is occupied by fascial, cellular and muscular tissue. The organ is directed somewhat obliquely downward and forward, so that the apex is the lowest portion, the base being uppermost and applied to the neck of the bladder; the anterior face is directed towards the pubes, and the posterior towards the rectum. The great masses of the gland lie on either side of the urethra; a stratum of prostatic tissue, about two lines in thickness, lies in front, and another about four lines thick behind it. This is not constant, for it is sometimes thicker in front than behind, and sometimes the strata are of equal thickness. The lateral portions are called lateral lobes; the anterior, anterior commissure; and the posterior, median portion or middle lobe, and posterior commissure. The entire gland is shaped somewhat like a full-grown chestnut, and the measurement of the transverse diameter at the base is about an inch and a half; of the antero-posterior diameter, about an inch; while its depth is about three-quarters of an inch, and it weighs about six drachms. The proper capsule of the organ covers in the whole organ, excepting at the base and apex, where the urethra enters and issues; and its inner surface is continuous with the stroma of the gland, sending off prolongations into its substance. The gland is held in place by the bladder above and behind; by the recto-vesical fascia reflected backward and laterally upon it; in front by the anterior true ligaments of the bladder and the levatores prostatæ muscle. The vascular supply is chiefly from the vesico-prostatic, a branch of the inferior vesical, and from small branches from the internal pudic artery. The nerves are from the prostatic plexus, a branch of the hypogastric plexus. The structure of the gland is multi-lobular, each lobule being imbedded in a stroma of muscular and elastic tissue, and having its excretory duct, which opens into the urethra, by the side of the verumontanum. The proper gland structure forms but a small part of the whole mass. Kolliker says ("Manual of Human Microscopic Anatomy," published in 1860): "The prostate, according to my observations, which are confirmed by V. Ellis, and partly also by Jarjavay, is a very muscular organ, the glandular substance scarcely contributing more than one-third, or the half of the entire mass."

Professor Ellis, of University college, says of this gland: "The prostate is essentially a muscular body, consisting of circular or orbicular involuntary fibres, with one large central hole for the passage of the urethra, and another smaller oblique opening, directed upward below the former, for the transmission of the common ejaculatory seminal ducts to the central urinary canal. The few longitudinal fibres on the upper surface of the prostate, which are derived from the external layer of the bladder, can scarcely be said to form a part of that body. Its circular fibres are directly continuous behind, without any separation, with the circular fibres of the bladder; and in front a thin stratum, about one-thirtieth of an inch thick, is prolonged forward from it, around the membranous part of the urethra, so as to separate this tube from the surrounding voluntary constrictive muscle.....Within, and quite distinct from the circular fibres, lies the tube of the urethra, incased by its submucous layer of longitudinal fibres. Toward the lower and outer aspects the fibres are less firmly applied together, especially where the vessels enter; and they appear to be superadded to those which join the coat of the bladder. As only so small a portion of the prostate is glandular, the propriety of calling that body a gland is doubtful; for the small secreting glands contained in it are but appendages of the mucous membrane, which project amongst the muscular fibres in the same way that the other glands of the urethra extend into the surrounding submucous tissues." Outside of those two principal layers there is a continuation of mixed pale, muscular, connective and elastic fibres, and of the gland structure; some fibres radiating outward from the circular fibres to the capsule, and others interlacing among the elements of the gland structure. so as to subject them, during contraction, to a certain degree of compression.

The mucous membrane of the prostatic urethra lies next internal to the thin layer of pale longitudinal muscular fibres. and is the lining of the canal. It is covered with the columnar variety of epithelium, always arranged in two layers, a superficial and deep layer; and has, when fresh, a pale, pinkish yellow tint, there being fewer minute bloodvessels than are found in the membranous and bulbous portions of the urethra, where a redder tinge consequently exists. The floor of the canal, at the orifice of the bladder, has a slight prominence, called the *uvula vesicæ*, produced, as some say, by the middle lobe, but really by an interlacement of muscular fibres from the inner coat of the bladder, beneath the mucous membrane, which fibres are sometimes apt to be unduly developed, so as to offer a serious impediment to micturition. From the uvula forward, the canal widens and the floor becomes depressed (*sinus prostaticus*) and broken by a central longitudinal elevation, the *verumontanum*, which commences in a faint whitish line, directly in front of the uvula, and, gradually rising for six or eight lines, reaches its highest point, a line and a half. It there widens and becomes rounded, and then, suddenly diminishing in height as it advances forward, gradually loses itself in the floor of the prostatic and membranous urethra. Into the *sinus prostaticus*, on each side of the *verumontanum*, the ducts of the prostatic lobules, from 20 to 24 or 30 in number, empty. Into the anterior border of the verumontanum, near the summit, there is a slit-like opening, leading into a sac in that elevation. called by different names, as utricle, uterus masculinus, vesicula prostatica, and sinus pocularis. The sac is somewhat oval in form, from two and a half to four lines in length, and from two to three at its greatest breadth, although occasionally found both larger and smaller. Its lining membrane is continuous with that of the urethra, and contains mucous follicles, which appear sometimes to secrete a dark brown and jelly-like substance, with which it is filled. The ejaculatory ducts, after penetrating the base of the prostate gland. behind the opening of the urethra, and obliquely to the axis of that canal, open into it by a slit-like opening, upon the border or just within the orifice of the sinus pocularis. From this description of the muscular tissue of the prostate gland, which is under the control of the involuntary nervous system, and of the prostatic urethra, it is easily explainable why that structure, when there is slight irritation of the mucous membrane, or nervous irritation, so strongly resists the introduction of an instrument into the bladder, and why spasmodic stricture, in this portion of the canal, should be so common.

The length of the membranous portion of the urethra has already been given, and its location between the separated layers of the triangular ligament of the urethra, or deep perineal fascia, the posterior of which is reflected backward upon the prostate gland, and the anterior forward upon the bulb of the urethra, while its lateral borders are attached firmly to the borders of the rami of the ischia and pubes. The mucous membrane is of the columnar variety of epithelium, is of a redder tint than that of the prostate, from its greater vascularity, and arranged in longitudinal folds, when the canal is empty, and smooth when it is distended. External to the mucous layer is a delicate layer of pale longitudinal involuntary muscular fibres, which is continued forward through the spongy portion; and outside of that, a thin stratum, a thirtieth of an inch thick, of involuntary circular fibres, continuous with those of the prostate, and which terminate at the bulb. More externally, surrounding the membranous portion, is a delicate extension of erectile tissue, continuing from the corpus spongiosum backward to the prostate gland; and, external to all, is the insertion of the fan-like compressor urethræ muscles of Wilson and Guthrie, which arise from the under surface of the symphysis pubis, and the upper part of the borders of the rami of the ischia, and surrounding the urethra are inserted into a raphé on its upper and lower surfaces, from the bulb in front to the apex of the prostate behind. All of those muscular layers are very thin, and this part of the canal has no firm substance surrounding it, like the prostatic and spongy portions; hence it is sometimes ruptured by the catheter, in an attempt to force it through a stricture located there. When that is the case, the urine is let into the recto-vesical space, and may produce serious consequences. The spongy portion of the urethra is surrounded by the corpus spongiosum, which commences opposite the symphysis, and below and in front of the triangular ligament, by a considerable expansion, called the bulb, and terminates, at the extremity of the penis, by another larger expansion, called the glans penis. It lies nearer the upper than the lower surface of that body, and terminates at the extremity of the glans, at the meatus urinarius. That portion of it within the bulb, is called the bulbous portion of the urethra. The bulb lies deep in the perinæum, filling the interval between the crura of the corpora cavernosa, and its size varies in different persons, and according to the state of the penis. It projects below the termination of the membranous urethra, which opens into its upper part, after penetrating the triangular ligament, and receives the insertion of a portion of the accelerator urinæ muscle. The body of the corpus spongiosum, in front of the bulb, is cylindrical, slightly tapering toward the glans. It is a trabeculated structure, surrounded by a thin, but firm, fibrous envelope, and containing within it longitudinal interlacing muscular fibres and erectile tissue, the latter of which consists, essentially, of an intricate venous plexus lodged in the interspaces between the trabeculæ. The veins of this plexus communicate so freely with one another that they present, on a section, a decidedly cellular appearance. They communicate with the dorsal veins of the penis, and with the prostatic plexus and pudendal veins. The arteries are derived from the internal pudic. The mucous membrane of this part of the canal is of the columnar variety, except near the meatus, where it is laminated. It is arranged in longitudinal folds when the canal is not distended, is of a redder tint in the bulbous portion, and has, especially upon its floor, numerous *lacunæ*, which are the orifices of glands and follicles, situated in the submucous tissue, and called the *glands of Littre.* One lacuna, larger than the rest, called lacuna magna, is situated an inch and a half from the meatus, on the upper surface of the fossa navicularis. They sometimes intercept the point of the catheter or bougie in its passage to the bladder. The ducts of the small glands of Cowper open into the floor of the bulbous urethra. Outside of the mucous membrane is a thin plane of pale longitudinal fibres, continuous with that of the other portions of the urethra, and external to that, the tissue proper of the corpus spongiosum. The triangular ligament of the urethra, or deep perineal fascia, sends a prolongation forward upon the bulb, as the urethra passes through it. Its lateral borders are attached to the rami of the ischia and pubes, and its posterior border is continuous with the posterior border of the deep layer of the superficial perineal fascia, which is reflected backwards, in front of the rectum, to meet it. Therefore extravasation of urine, from rupture of this portion of the urethra with the catheter, is confined to the parts about the scrotum and penis, and inferior and lateral portions of the abdomen; being prevented from getting to the parts around the anus (ischio-rectal fossa), by the attachments of the fascia just described. The lining membrane of the urethra is continuous with the covering of the glans, through the meatus urinarius, with the mucous membrane of the bladder, through the mouth of the bladder, and with that of the vesiculæ seminales, and vasa deferentia, through the ejaculatory ducts. From various causes it is subject to a great variety of pathological conditions, some of which will now be described.

No. 93 E. 17th st., New York.

[*To be continued.*]

PERISCOPE.

Medical Manners; Advice to Young Men.

There is a great want in our medical colleges, namely, a professor of good manners. If a young man ever expects to succeed in polite life, he must clearly recognize the necessity of conducting himself as a gentleman. We have very little space, therefore we must be brief in the few hints we propose to give.

When you enter a room, never offer your hand; if that is to be a part of the ceremony of recognition, wait till your friend offers his; he is to welcome *you* to his house; you are not receiving him.

Never offer an ungloved hand to a lady who is not ill; physicians' hands are often looked upon with suspicion; besides some people's hands are cold or always perspiring.

Never sit in her chair; if you have any perception, you can always tell it; to take that chair is an insult to her.

Never sit in an easy-chair, or even an arm-chair, if you wish to deport yourself elegantly; if you are fatigued when you go home, lie down on a sofa or couch, which you should always have in your office. If you are watching at the bedside, it is another matter; then you become for the time as a brother, and may be treated as such.

Never spit or apply a tooth-pick, or make an audible noise of any kind with your tongue, except articulate speech, in presence of any person; if you will do such things, polite people will always consider you a very low fellow.

Never cut, brush, pick or trim your finger nails in presence of any one, not even your servant, for fear you may forget yourself and do it in presence of a stranger; which, if he or she be a polite person, must classify you with vulgar people.

Never take up any article from a table, whether one of taste, however trifling, or a surgical instrument in your friend's office, to examine it; if your opinion is desired, it will be presented to you; if not, take no notice of it, unless it be evidently placed there for admiration, and not to be touched ; then you may notice it politely if you are intimate ; if not, say nothing about it. Books are exceptions to this rule ; they are supposed to be placed there to be read if waiting ; use them carefully, and replace precisely whence you took them.

Never tilt back your chair ; it conveys evidence of being ill at ease ; it requires effort, and is never done by well-bred people.

Never go in presence of a lady if you smoke or chew tobacco ; it makes you smell bad, and is horribly offensive to most well-bred people. Never use any kind of perfume ; if you do, people will have cause to think you labor under some disease which requires concealment.

Never wear jewelry of any kind, unless you would be a fop.

Never go out of your house till you have thoroughly made your toilet. Keep your hands from your head and beard ; if you have occasion, apply your handkerchief, and immediately after its use put it in your pocket ; it is not an object of display, and is not supposed to be agreeable when flirted about.

Never approach a lady near enough to touch her dress with your feet ; never place one leg over the other. If you wish to feel the pulse, or make any physical examination, do it with strict attention to delicacy and gentleness, and after you have done, remove your chair a short distance.

Never give a patient, or any one else, your breath, or receive his or hers if possible ; you can easily avert your head and avoid it.

Clean your feet, and knock at the door, when entering the meanest hovel of the most wretched patient ; always remove your hat on entering, especially the apartments of colored people, for they are usually very polite, and it degrades your profession to be inferior to them in civility.

Never allow the slightest interference of a stranger in your operations or prescriptions ; it is the business of the nurse and attendants to obey, not to direct.

Never argue or start any subject of dispute, medical or religious; you are not supposed the spiritual, but the medical adviser; and if your patient will argue on medical matters, the impoliteness is not on on your side; if he persists, you can avoid it by taking your leave.

Never pay an unnecessary visit; if your visits are those of friendship let it be so understood.

Always send in your bill, even if you are the family attendant, a fortnight at farthest after attendance, whilst the memory of the services is fresh; it saves hard feelings at the settlement, for people are very apt to forget the trouble they gave you when they see your bill.

If a patient ask your opinion of another physician during your attendance, he means one of two things; either to propose a consultation with you, or he is contemplating your discharge, and wants you to commit an offence by speaking lightly of the man about whom he is questioning you; behave like a *man*—give the absent his actual due of merit to the letter; if you know him to be a quack or a scoundrel, decline politely an answer, and say you do not wish to meet him, but will cheerfully retire in his favor. Never start any objection, unless you feel it a sacred duty, in reference to your patient's safety; then you may calmly speak the truth, and let him make another proposition; as a general rule you will find it necessary to retire, but you have done your duty. Any inquiry at other times than those of illness, must be politely answered with as much favor to the absent as possible. If he be not an educated and regular practitioner of scientific medicine, give your views distinctly; you will only be annoyed by such patients; if they desire quackery, they will have it; their own pride of opinion is at stake, and if you oppose them, they become enemies and slander you.

If you esteem the friendship of a medical or surgical friend of consequence to yourself, and you make a call on him, don't, for heaven's sake, bore him; get up and leave his office immediately on the entrance of a person on business. If you are invited to remain, never open your mouth to ask a question or make a remark, unless your friend addresses you. If you speak to the patient on the subject of his disease, or volunteer any advice, you should expect immediate reproof; it is the height of rudness and impropriety.

Never invite a friend to witness an operation or to see a patient, unless you have asked it as a favor, beforehand; and do not be surprised if he should decline, particularly if you are not supposed to be his equal in reputation, and the patient be one of consequence; you may not in his opinion be capable of managing the case; and if he goes, he incurs the responsibility of the visit without the fee; that is selfish and unfair in you. If you invite him to consult, and the patient has not desired it, you ought to pay the fee, unless it is understood to be a favor to you; then you ought not to do it often, unless you are his equal and in the habit of returning the favor.—*Scalpel.*

Paralysis Produced by Phosphorus.

M. Gallavardin, of Lyons, has been led to publish the results of his experience on the above subject, in consequence of a paper which recently appeared in the *Gazette des Hopitaux* from the pen of M. Demarquay. In this latter, the writer, though purporting to describe all the cases of paralysis consequent on poisoning, omitted all those due to the action of phosphorus. These, however, M. Gallavardin now supplies. He quotes from a memoir he some time since published on Phosphoric Paralysis. The following are the cases which occurred in man and animals:—Paralysis of the left arm, 1; paralysis of both hands, 1; paralysis of the anterior limbs, 2; paralysis of the four limbs, 6; paraplegia. 4; paraplegic symptoms, 4; hemiplegic symptoms, 4; opisthotonos, 2; trismus, 2; muscular convulsions of face, 1; paralysis of tongue, 3; convulsions of eyelids and eye-muscles, 1; symptoms of paralysis of third pair, 2; spasm or paralysis of the sphincter ani, 5; spasm or paralysis of the sphyncter of the bladder, 8; general progressive paralysis, 1; partial paralysis, 1; paralytic symptoms, 2; muscular weakness, 19; trembling of body and limbs, 8; tonic or clonic convulsions, 20; convulsive movements of diaphragm, 1; momentary paralysis of heart, 1; fatty degeneration of muscles, 4; fatty degeneration of heart, 4.

Citrate of Soda in Diabetes.

M. Guyot-Danecy, basing his practice upon the theory that diabetes arises from imperfect combustion of the glucose of the blood, proposes to employ citrate of soda in order to supply the alkaline carbonate which is necessary to the progressive chemical change of the glucose. He substitutes the citrate for the carbonate, because, he says, it does not affect the function of digestion. He administers the salt in doses of from four to eight grammes. His analyses, he alleges. demonstrate that sugar disappears from the urine after the administration of the citrate. Citrate of soda may be mixed with food instead of salt, and with it the use of ordinary bread and starchy matters ceases to be objectionable.

Long Umbilical Cords a Source of Danger to the Life of Fœtus. (Edinburgh Medical Journal, April, 1866.)

" At the February Meeting of the Obstetrical Society, Dr. Inglis exhibited two umbilical cords, each over four feet long. They were taken from the same patient, the first one four years since, the other that morning. At both times the child died from strangulation of the cords previous to delivery. This recurrence, he said, was not uncommon, and had been mentioned by him at a meeting of the Royal Medical Society in 1858, when he showed a cord five feet and four inches in length, taken from a patient who had previously lost a child from the same cause. Since then this same patient had lost another child in the same manner." The frequency with which the child's life is endangered from coiling of the cord around the neck makes it desirable that this complication should be ascertained before the head is born. Dr. Haake—quoted in the British Foreign Medico-Chirurgical Review, for January—says it may be done by examining with the finger, *per rectum.* The finger can easily be carried above the head so as to feel the cord and its pulsations.

◆

EDITORIAL.

Is Mercury Poisonous?

In the present advanced state of chemical science it is really incomprehensible how a set of men can be found who will administer mercury as a remedial agent. Whether the human mind has degenerated in its moral development, or whether the great mass of physicians have retrograded in knowledge, or—which is the same—whether they are standing still and allowing the world to pass them and leave them far in the rear of progress, we cannot assert. To administer mercury at the present day is irrefragable proof that one of the above conditions certainly exists. The investigations of chemists have led to the most startling developments in regard to the affinity of the pernicious metals for organic matter, both effete and vital. In the year 1845 Prof. Sanders, of the Eclectic Medical College of New York, proved by experiments that have frequently been repeated and never yet denied, except by those incompetent to test their truth, that mercury, copper, arsenic, lead and antimony, and all other metals not a normal constituent of the system, can be electrolyzed from it without in the least disturbing those metals which form component parts of the body. Now it is a law, developed by Prof. Faraday, that none but *compounds* will admit of electrolysis; hence mercury *per se* cannot be electrolyzed, but ere that can be done it must exist in the system in combination with some of the tissues of the body. Thus electrolysis has proved incontestably that mercury, instead of acting as a remedial agent, at once obeys its powerful affinities, and forms insoluble and durable compounds with the living tissues. These compounds exist throughout life, unless decomposed by a strong voltaic current. All of those terrible manifestations of inscrutable disease, termed by the Allopathic destroyers

"Mercurial Diseases," proceed only from the presence of these mercurial compounds. Remove this mercury, and then only will these affections cease.

We said that mercury has a powerful affinity for organic matter. This can be easily demonstrated by adding a solution of mercury to organic matter, when a flocculent precipitate will at once be formed. This is a compound of the mercury with the organic matter. To prove this, heat some of it in a test-tube, when the compound will be decomposed and the mercury will be precipitated in the cold portion of the tube, as a bright mirror; or submit this organo-mercuric compound to hydrochloric acid, when it will become de composed; the mercury will be dissolved as a bichloride. Now add a little iodide of potassium, when a precipitate of the brilliant red biniodide of mercury will be produced. The late investigations of chemists have proved that mercury possesses an intense affinity for the organic radicals. The hydrogen atoms in ammonia are readily displaced by mercury, forming either a primary or secondary or tertiary compound. They are all very stable combinations, and there is not a doubt but that these compounds, or others analogous to them, are formed in the system during life. This is equally true with copper, antimony, arsenic, lead, and other metals, but mercury appears to have the strongest affinity for organic matter, and to form the most stable compounds. Now, in the face of these startling facts, does not the administration of mercury indicate that he who administers it is either lamentably ignorant, or is lost to those delicate sentiments of humanity and independence which prompt the nobly organized to deeds of humanity, despite the cavillings of those whose opinions are unworthy of notice.

It was but a brief time ago that the lancet was the inseparable companion of the physician, and thousands of warm hearts ceased to beat for want of the living blood this terrible instrument let out from their channels. The reign of the lancet has ceased, and it will not be many years ere the further spread of Eclecticism will drive away the equally destructive metals, mercury, arsenic, antimony, and lead, from the entire materia medica.

Let us heartily pray for that millennial epoch in medicine, when the bills of mortality will dwindle down to one-tenth their present terrible length; when the undertaker will be necessitated to live less sumptuously, and the incompetent physician may be driven to some more useful and less dangerous employment.

To Eclectic Physicians.—A valuable Suggestion.

One striking peculiarity of Eclectic and reform practitioners everywhere is, that each one, for himself, has struck out an independent plan of practice in the treatment of disease. This comes, in a great measure, from dissatisfaction at the results of old routine methods, a conscientious conviction that nearly all cases of ordinary or even extraordinary sickness should get well by a proper rational mode of treatment, and a diligent and independent inquiry concerning agents to effect those favorable results. In this way each one finds out for himself something good that perhaps is known only to himself, or some particular variety of treatment that produces an unusually large ratio of cures. Such physicians would do much good by appropriating a few hours every week in recording such modes of treatment, or the peculiarities of action of any agents, or any discovery of any new agent that he has proved highly useful, and sending such record monthly to be published in this Review. No one man knows everything, neither can he discover all that is to be discovered; and so he is glad to learn of others' discoveries, which he would otherwise never know, and should do his part in adding to the stock of general knowledge.

A medical journal teaches not by the words of the Editor merely, but by its becoming a faithful medium of communication between the active minds of the country, and is welcome and valuable in the proportion that it contains a variety of readable as well as sound and interesting matter. Every Eclectic physician is supposed to be open to suggestion, and eager to improve, by every means, his treatment of disease; and looks to his colaborers for facts which have escaped him, but which are known to the other. We, as Eclectics, want to record the results of a thorough testing of each one of the concentrated powders of the different medicinal plants, (the manufacturer being named,) by the physicians in active practice in the country or towns where they carry their own medicines, and give them singly or in combination. Also the result of a testing of the concentrated tincture, and especially of those called essential tinctures, each one of them separately, so that physicians can call for them with confidence, seeing the results of a reliable testing of them in practice. Those which are the best will soon take the foremost rank.

If our friends will second us in these efforts we will soon have a much more reliable array of concentrated agents—those of which we can speak without doubt or uncertainty.

The Mott Memorial Library.

The Medical Profession of New York is again in receipt of one of those peculiar and valuable donations which gives such commanding influence and position to this city.

Mrs. Valentine Mott, the widow of the late distinguished Prof. Mott, has placed the profession of New York and all the friends and admirers of her late husband under lasting obligations by the establishment of this institution.

We extract the following from the Philadelphia Reporter of Oct. 20, 1866.

"What the late Professor Mütter did for Philadelphia, the widow of the late Valentine Mott has done for New York. At an expense of more than $30,000, she has purchased, enlarged and fitted up at No. 58 Madison Avenue, between 27th and 28th streets, a building in which are deposited the medical library, and the surgical instruments of her late husband, the distinguished American Surgeon, Valentine Mott.

"On Thursday evening, the 11th inst., the building was thrown open to the friends of the Institution, and it was formally dedicated with appropriate services.

"The building is designed by Mrs. Mott for the twofold purpose of a monument to her husband, and an institution of free instruction to the medical students of the colleges of New York.

"The room in which the exercises were held is a fine airy little room extending the whole depth of the building, which has been extended twenty-one feet. A neat gallery has been added to the hall, with which it has a capacity for seating some 600 persons. The library of the late Dr. Mott, with the shelves prepared for donations, fills the walls of the room. Upon the platform are two fine casts of the bust of Dr. Mott, above which are scrolls bearing the words, "In Memoriam."

"The following are the trustees of the Mott Memorial Library: Hon. John T. Hoffman, Mayor; Hon. Matthew T. Brennan, Comptroller; Hon. John K. Hackett, Recorder; Hon. Henry Hilton, Hon. George Opdyke, Hon. Isaac Bell, Hon. Charles K. Kirkland, Rev. Dr. Houghton, A. T. Stewart, Esq., Charles P. Leveret, Esq., Philetus H. Holt, Esq., A. B. Mott, M. D.; Austin Flint, M. D.; Wm. H. Van Buren, M. D.; Edward Vanderpoel, M. D.; Mr. L. D. Mott.

"Board of Officers.—A. B. Mott, M. D., President; Charles P. Kirkland, Esq., Treasurer; Edward Vanderpoel, M. D., Secretary.

"The inaugural ceremonies were presided over by Dr. Alexander B. Mott. The Rev. Dr. Houghton opened the exercises with prayer, after which the Rev. Dr. Chapin addressed the audience.

" Addresses were also made by Dr. Elliot and Mr. Charles P. Kirkland."

The Editor closes his remarks as follows :

" We trust that the medical profession of Philadelphia and New York will foster these institutions, and that they will rapidly grow, and be able to command all the means necessary to carry out to the fullest extent the intentions of their benevolent and considerate founders."

The gentlemen who have been selected as the custodians of this Institution are in every way well worthy and capable of so important a position, and if they co-operate with the medical friends of Dr. Mott, they will greatly increase the institution by securing large donations especially to the library.

This is as it should be, and the Medical Profession should ever revere and perpetuate the justly honored name of Valentine Mott.

Prof. Mott was born at Glen Cove, Long Island, Aug. 20th, 1785, and died April 26th, 1865.

A New Book.

The Eclectic Medical Practice of Medicine, by Robert Newton, M. D., is now being published in this city ; about four hundred pages have already been completed, and it is passing through the press rapidly.

Every possible care is being taken to have this work up to the times. The work will be furnished to subscribers at Six Dollars a copy. Any one wishing the work can send on their orders, which will be attended to as soon as the book is complete.

What is thought of the Eclectic Treatment of Cholera, in Europe.

"Saunders' News Letter and Daily Advertiser" of Dublin, Ireland, contains the article written by O. E. Newton, M. D., of Cincinnati, on " Cholera and its Treatment." It was published in the Cincinnati " Daily and Weekly Times," also in this Review. It has been extensively copied by the press—not only of this country but of Europe. The suggestions contained in this article, especially those relating to the early treatment of the disease, and the importance of every family having on hand medicines suitable for the various stages of the disease, are peculiarly valuable, and have proved of vital importance.

The Dublin Paper in which it is published, is one of the most ably edited and widely circulated in Ireland.

The Allopathic Code of Medical Ethics.

Of the thirty-three thousand physicians in the United States, there are not twelve thousand who are governed by this unreasonable and unjust regulation made by the few who regulate for the control of the many.

In this city, out of the fifteen hundred physicians there are only about seven hundred that are willing to receive the yoke that is placed upon their necks by the leaders of this medical party. These leaders are nearly all connected with Medical Colleges and Institutions which keep their names constantly and prominently before the public. In these relations they are daily advertised by the press of the land, yet if a single man outside of this "ring" should even dare to have his place of business mentioned, he would at once be attacked by the leaders of the party, who say this is contrary to the code, and cannot be tolerated.

From the various advertisements we learn that it takes eighteen medical gentlemen of this city to make a Faculty of one of the Allopathic Colleges, and also through the same advertisements we see the names of forty-one additional medical gentlemen connected with another department of this same institution.

Their advertisements are "legitimate and regular," because they fully advertise the Allopathic "regular" "ring-masters," yet if a single member of the medical profession, to keep himself from suffering for the common necessities of life, was to advertise as they do, he would be excommunicated at once by these same physicians.

State Appropriations for Charitable Purposes.

The following is a list of the appropriations made by the last General Assembly of this State for benevolent purposes. No State in the Union makes such generous donations as New York :—

For the Orphan Asylums, homes for the friendless and other charitable institutions of like character, $80,000—the sum to be divided in proportion to the number of persons and orphans maintained at each; to the Albany Orphan Asylum, the Albany Guardian, Society, Home for the Friendless, Sheltering Arms Association of New York, Brooklyn Orphan Asylum, Industrial School, Home for Destitute Children at Buffalo, St. Vincent's Troy and Albany Orphan Asylums, Cayuga Asylum for Orphans, Troy Male Orphan Asylum, Colored Home and Orphan Asylum of New York, Davenport Institution for Orphans at Bath, the Evangelical Dathem Home, Female Guardian and Home for the Friendless at New York, Five Points House of Industry, Forest Orphan Institute, French School attached to Sacred Heart, Hebrew Benevolent Society, Home for Seamen's Children of Richmond County, and the following charitable associations and institutions in New York City—Juvenile Guardian Society, New York Orphan Asylum, Nursery and Child's Hospital, Protestant Episcopal Orphan Asylum, Protestant Orphan Asylum, Roman Catholic Orphan Asylum of Brooklyn and New York, Protection of Destitute Roman Catholic Children, St. Joseph's Orphan Asylum; to the Juvenile Guardian Society of New York, $1,000; to St. Mary's and St. Bridget's Church, for the maintenance of schools, $1,000 each; for the hospitals of the State, except those in the City of New York, to be divided equally among them, in proportion to number of persons maintained, $55,000; to the New York Ophthalmic Hospital, $1,000; Eye and Ear Infirmary, $5,000; Women's Infirmary at Washington Heights, $2,000; Cascadilla Place Infirmary, $2,000, and to be divided among the several dispensaries of the State, $12,000.

Interference of Nurses.

It is a fact, to which the profession should look, that nurses often destroy the lives of females who ought to recover from the effects of parturition. Cases have come under our notice where serious injury has been done to patients by the refusal of nurses to follow the direction of the accoucheur. It is a nurse's duty to abstain from all interference, and to implicitly follow the directions of the attending physician. No nurse should be employed who is known to have refused to follow the directions in every respect of the medical man in attendance.

Infantile Mortality in the City.

Until mothers learn how to manage children, death will hold high carnival among the innocents. If children are indulged in every whim, and allowed to gratify every appetite—to gorge themselves with fats, and sweets, scalding hot coffee and high seasoned food—then we may expect to have them afflicted with all manner of diseases, from cholera infantum to scrofula. If mothers dress them up in an extra amount of flannel one day, and in gauze the next; if they keep them from the pure air, and let them sleep in thick feather beds; if they let them spend the best part of the night in infantile flirtation, at baby balls, and then compel them to spend a large portion of the day in a close school-room, or renew the ball scene next night, they will blight and fade like sickly flowers.

Every mother should study physiology, and thus inform herself of those conditions which are to be observed if she would keep her children healthy. She should be willing to be guided by rational advice, such as is to be found in all the works on infantile diseases, Mothers who allow unfeeling nurses to carry the children into crowded houses and parks; mingling with every stranger, and drugging them, as is the practice too often in their absence; they should not consider the death of their children in any other light than the result of a gross violation of every law, and their own duty to their children; yet many mothers who thus treat their children comfort themselves while mourning their loss by supposing the following applies to their case: "The Lord giveth and the Lord taketh away; blessed be the name of the Lord."

◆ • ◆

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Biographical Sketches of distinguished living New York Surgeons. By Samuel W. Francis, A. M., M. D. Fellow of the New York Academy of Medicine. (Reprinted from the *Philadelphia Medical and Surgical Reporter.*)

This little work, a continuation of which is being published in the Philadelphia Medical and Surgical Reporter, entitles the author to the gratitude of all medical men, and, indeed, of all others who are interested in the personal history of some of the first medical men in this country. The only regret that we have is, that he did not tell us more of them, and that the individual sketches were of necessity cut so short. There are so many incidents in the course of an active life engaged in professional pursuits, such as that of each one of them, that, if recorded, would enchain the attention, as well as gratify curiosity, that we hope the author will, in another and more complete work, satisfy this demand. It is a work of considerable literary merit withal, showing that the author has talent for work outside of the ordinary routine labors of the profession. He is the son of one of our best-known and distinguished physicians, and is himself personally acquainted with those whose biographies he now gives to the public.

In the work before us he begins with Valentine Mott, M. D., LL.D., whose distinguished and life-long services and eminent abilities, as a surgeon, have made for himself a world-wide reputation, as well as conferred distinguished honor on our country, and especially on this city, in which the greater portion of his life was spent. All men delight to know of him, and all delight to honor him.

Graphic sketches are given of William H. Van Buren, Alfred C. Post, Frank H. Hamilton, John Murray Carnochan, James R. Wood, Lewis A. Sayre, Alexander B. Mott, John P. Batchelder, Alexander H. Stephens, Willard Parker, Gurdon Buck, John Swinburne, Julius Stephen Thebaud, Stephen Smith, and Alexander E. Hosack. We enjoyed its perusal, and would recommend it to those who would like to know something of the active minds in the sphere of medical science and literature. It will be a choice treat, in the hours of relaxation from the sterner duties of every-day life and practice.

The work comprises some 220 pages; is neatly gotten up, in good type, on fair paper, and strongly bound in cloth. An admirable engraving of the late Prof. Valentine Mott adorns the frontispiece, which is of itself quite an attractive feature of the work for those who have never seen him.

NEWS AND MISCELLANY.

(Abstracts from Braithwaite's Retrospect.)

Contagious Fevers.—Fevers are due to the passage from one body to another of living particles. These living particles consist of germinal matter, and have descended by a process of degeneration from the germinal matter of the organism itself, and are therefore of animal origin. To those familiar with vital phenomena, the fact that a terrible and fatal malady may arise from the introduction into the body of a minute germ, weighing less than the one-hundred-thousandeth of a grain, will not appear incredible. (Dr. Lionel Beale.)

Fevers, Tabes Mesenterica, Gastric Irritation, &c.—Give the hypophosphite of lime, soda, or potash. The following formula for an infant is good: ℞ Hypophos. sodæ, gr. vi.; hypophos. calcis, hypophos. potass., ana gr. iv.; glycerinæ, ʒ ii.; aquæ ℥ i. M.; forty drops three times a day in a little water. The dose to be increased according to age. (Dr. H. S. Purdon.)

Ozone as a Disinfectant.—Get a wide-necked bottle and put in half a pint of water, with a cork floating at the top; on this cork fix a bit of phosphorus; cover the bottle with another bit of cork very loosely

This apparatus may be moved from room to room, remaining till the characteristic smell of ozone is perceived. Do this night and morning. (Dr. T. Moffatt.)

SCARLET FEVER.—*Inunction with Hot Fat or Lard.*—Once or twice in the twenty-four hours let the patient be rubbed with hot fat or lard. This checks or quells the violence of the disorder in an extraordinary manner. Death is a rare result, and dropsical symptoms are almost unknown. The pulse will sometimes fall thirty beats in three hours. (Mr. J. L. Milton.)

ZYMOTIC DISEASES.—The fermentations of poisons in the system, generating zymotic diseases, may be arrested by the alkaline sulphites, the same as vinous fermentation is arrested by sulphurous acid. Therefore in typhus, typhoid, scarlatina, small-pox, &c., give scruple doses of sulphite of soda every three or four hours. This dose may be decreased or increased according to circumstances and age. (Dr. De' Ricci.)

CHOREA.—*Calabar Bean.*—In a case of chorea recorded, four drops of a tincture of calabar bean were given thrice daily, and gradually increased in quantity during a period of nine weeks. Complete recovery resulted. All means previously tried during the course of several months had proved useless. (Dr. J. W. Ogle.)

DELIRIUM TREMENS.—*Subcutaneous Injection of Morphia.*—In cerebral affections medicines called anodynes, when introduced subcutaneously, frequently act so far more effectually, and so differently from the stomachic doses of the same, as almost to warrant us in considering them as different medicines. Thus in delirium tremens, half-grain doses of morphia may be given repeatedly without effect, whilst one such dose introduced subcutaneously will frequently produce sleep. The use of the drug in this manner, moreover, is not followed by dryness of the mouth, and sickness and constipation of the bowels. (Mr. C. Hunter.)

EPILEPSY.—*Ice to the Spine.*—A most interesting case is related in which the patient was cured of severe epilepsy of long standing, by means of ice to the spine. He had many symptoms of spinal and cerebral irritation. Ice was applied along the whole spine during two hours, four times in each twenty-four hours, one bag being applied at bed-time, one being used during the night, and the other two during the day. He had no fit after this treatment was commenced, although previously he had three fits a day. The cure was permanent. (Dr. J. Chapman.)

INCURABLE AND PAINFUL DISEASES.—*Subcutaneous Injection of Morphia.*—By means of subcutaneous injection, life in these cases is made bearable. It may for a long time prove a boon to patients suffering from incurable neuralgia, cancer, or the agony of diseased joints. One-third of a grain of morphia introduced subcutaneously every alternate day, will sometimes give all the relief that two grains given daily had previously done. (Mr. C. Hunter.)

INSOMNIA.—In cases of insomnia, bromide of potassium can almost always be used with advantage, to diminish the amount of blood in the brain, and to allay any excitement of the nervous system. (Dr. W. A. Hammond.)

NEURALGIA.—*Hypophosphites.*—Try hypophosphite of soda in doses of a drachm three times a day in beef-tea. (Dr. T. H. Jackson.)

Hypodermic Injection.—When opiates or other anodynes are injected subcutaneously for the relief of a local neuralgia, it is quite unnecessary to inject the neuralgic side; the medicine will act just as well when inserted in any other part of the body. (Mr. C. Hunter.)

Sciatica.—*Croton Oil.*—Give a dose of two drops of croton oil; in many cases cessation of the pain will immediately ensue on the copious action of the medicine. (Dr. S. C. Sewell.)

Subcutaneous Injection of Atropine.—A lady had suffered from sciatica for two years, for which she had been obliged to take morphia daily. The subcutaneous injection of one-thirtieth of a grain of atropine produced its characteristic phenomena upon the system, and forthwith removed the pain permanently. (Mr. C. Hunter.)

Danger of Subcutaneous Injections.—Be very careful not to inject into a subcutaneous vein instead of into the cellular tissue. As it may be impossible to avoid this at all times, always inject very slowly—in order that at the first sign of danger the injection may be stopped. (Prof. Nassbaum.)

Tic-Doloureux.—*Subcutaneous Injection of Atropine.*—Inject $\frac{1}{30}$ of a grain of atropine subcutaneously, and repeat occasionally at intervals of two or three days, if necessary. It is not necessary to inject it in the region of the pain. (Mr. C. Hunter.)

Hemorrhoids.—An ointment of persulphate of iron (ʒ ss.–ʒ j. ad oz.) in hemorrhoids is an excellent application when they are ulcerated, or when the constitution is weakened by diarrhœa or excessive fatigue. (Assistant-Surgeon Cartwright.)

Internal Hemorrhoids—Clamp versus Ligature.—The danger of pyæmia from the use of the ligature for the removal of hemorrhoids has been very much overrated, and other means, such as the clamp, proposed instead. There is however, no plan more effectual or safer than the use of the ligature. Sir Benj. Brodie only saw two deaths out of 300 operations. Mr. Syme has never met with a case which terminated fatally, or threatened to do so, when the ligature simply was employed. The operation by the clamp is undoubtedly an effectual method of removing the disease, but it is in many respects inferior to that of the ligature. It is unnecessary to ligature the whole tumor, for the vessels which supply it always descend from above, just beneath the mucous membrane; the lower three-fourths may therefore be divided from the base by scissors, and the remaining fourth ligatured. When the ligatures have been tied, the bulk of the tumours may be cut away. (Mr. J. R. Lane.)

Inguinal Hernia.—*Radical Cure of.*—The success of an operation for the radical cure of inguinal hernia does not depend so much on retention of the invaginated scrotum within the canal, as on the formation there of a quantity of exudation and cicatrix tissue. Success frequently results when the invagination has completely descended, provided the patient has not by any premature over-exertion forced down the protrusion whilst the process of cicatrization is yet incomplete. (Dr. J. Fayrer.)

Polypoid Growths in the Rectum, with Fissure.—Occasionally polypus of the rectum is associated with anal fissure, the latter being a consequence of the former. A free incision must be made through the fissure, the polypus drawn down by a vulsellum, and a ligature applied at its point of attachment. It must then be cut off just beyond the ligature. (Mr. J. R. Lane.)

Lithotomy.—That free division of the prostate which implies a division of the reflected portion of the pelvic fascia. This should always be left untouched, for stones of great magnitude may be removed without such free use of the knife. This is one of the principal secrets of success. (Prof. Fergusson.)

Infiltration of urine is the bugbear of modern lithotomists. I have never seen a genuine case of it. Diffuse inflammation of cellular tissue, arising from some unhealthy state of the constitution, is often confounded with infiltration. (Prof. Fergusson.)

LITHOTRITY *versus* LITHOTOMY.—Lithotomy should be preferred in patients below the age of 15, as being more successful than lithotrity. Could blades be brought against small stones, so as effectually to crush them to sand, this operation might after all be found to be one more generally applicable in children than it is usually deemed. In the female, any other operation than lithotrity should be an exception to the rule. In adult males, lithotrity should be considered the rule, and lithotomy the exception. It is in many cases desirable to dilate the urethra with bougies before crushing, and their use is often advisable to relieve irritability. (Prof. Fergusson.)

TEST OF INFLAMMATION IN JOINTS.—In every important joint there is some one spot peculiar to each, tenderness on pressure in which indicates the presence of latent inflammation. These are, for the knee, a small space over the inner trochanter and inside the patella; for the elbow, the posterior part of the junction between the radius and humerus; for the wrist, the union between the scaphoid and ulna; for the ankle, a spot just outside the extensor longus tendon. For the shoulder, this choice spot of tenderness is situated at the back and external aspect, where the posterior fibres of the deltoid cross the joint; at the hip, the test place is just behind the trochanter. (Mr. R. Barwell.)

CARBUNCLE.—*Subcutaneous Section.*—The following plan of treating carbuncle has been pursued with great success for many years by Mr. French, surgeon to the St. James's Infirmary. Let a tenotomy knife be introduced through the healthy skin a little beyond the edge of the induration, the forefinger of the left hand serving as a guide upon the surface of the tumor. Let it be divided subcutaneously with a crucial incision, the skin being left uninjured. Immediate relief is obtained, and the rapidity of the recovery which follows is very striking. The knife may be entered several times, if the carbuncle is very large. (Mr. C. Heath.)

CATARACT.—There is no notable difference between the results of the upward and downward section, if equally well performed; but the downward operation is generally carried out more perfectly, in consequence of the greater rapidity and facility with which it may be executed. The operation for cataract should be performed in bed, in order that the patient may have the advantage of being in a position of the most complete muscular repose, and of being able to remain in the same position after the operation. The operation being on the right eye, the surgeon must sit behind the head of the bed. Immediately after the operation, the compress bandage must be applied. The orbit should be equally padded with picked lint, in little discs, over which a simple ascending turn of a flannel bandage is moderately tightly drawn across the eye. In a case which is running a favorable course, it is unnecessary to open the lids until four or five days after the operation. (Dr. Von. Graefe.)

ABORTION.—When the general symptoms, such as a shrunk condition of the papillæ of the breasts, a watery uterine discharge, and extreme lassitude, indicate the death of the early fœtus, it is better to give ergot at once; if this fail, the introduction of sponge-tents will be sure to produce expulsion. (Dr. C. Bell.)

Puerperal Convulsions.—Chloroform.—In an interesting case of severe puerperal convulsions attended with opisthotonos and symptoms resembling those produced by strychnine, the use of chloroform produced marked alleviations of the symptoms. The inhalation was kept up for three hours, and the patient ultimately recovered. (Dr. J. Cuthill.)

REMOVAL OF THE PLACENTA.—When the child is born, the hand must follow the descending womb, and grasp it, so gently as not to cause pain, and yet with a moderate firmness. This pressure ought to be relaxed as little as possible during the separation of the child. The placenta will now usually be found partially extruded, and a short continuance of the pressure will effect complete expulsion. (Dr. Paterson.)

TEDIOUS LABOR.—*Ergot.*—When we desire to produce pains exactly like the natural labor pains, that is, not so severe as to be continuous, we ought not to employ the large doses of ergot usually given. Five grains given every quarter of an hour will produce all effects desired. (Dr. D. Dyce Brown.)

VESICO-VAGINAL AND RECTO-VAGINAL FISTULÆ.—In the operation for the cure of vesico-vaginal fistula, the principal element of success is the absence of irregularity or raggedness of the wound's surface. If any such irregularity exists, primary adhesion of the edges cannot take place. To render the paring of the edges more certain and satisfactory, Mr. Bryant, of Guy's Hospital, has invented an instrument to transfix and steady the part, whilst at the same time it acts as a guide to the knife. The instrument consists of a handle, to which are adaptable six guides, three for transverse and three for vertical fistulæ. In each of these two sets there is one with three prongs, one with two, and one with only one prong. In the set for transverse fistulæ, these prongs are in the same line as the handle, whilst in that for vertical fistulæ, they are at a right angle. In both sets the prongs are set in a bar, in the same manner as the prongs of a rake. These prongs should be inserted at the edge of, but not through, the mucous membrane of the bladder, and passed *between* the tissues, and then brought out through the mucous membrane of the vagina. It is now easy with one sweep of the knife to remove the transfixed portion of tissue. The lower margin must then be treated in the same manner as the upper, and the raw surfaces be brought together by wire sutures. (Mr. T. Bryant.)

CONNECTICUT REFORM MEDICAL ASSOCIATION.—The Semi-annual meeting of this Association was held at Meriden, Conn., on the 20th of Nov., 1866. The meeting was largely attended. Professors Wm. H. Hadley and Robert S. Newton, of the New York Eclectic Medical College, were present. A new Constitution and By-Laws was adopted. A committee was appointed to petition the Legislature of the State to change the name of the Association from the "Medical Reform" to the "Eclectic Medical Association."

The Legislature of Connecticut at its last session, made a donation of ten thousand dollars to the Eclectic and Homœopathic Physicians of that State, to aid in building a State Hospital.

THE VERMONT STATE ECLECTIC MEDICAL SOCIETY held its first semi-annual meeting at Montpelier, October 25, 1866. The meeting was called to order by the President, A. G. Brush, M. D., of Fairfax; the exercises were opened by prayer by Rev. Dr. Goodrich, of Philadelphia.

The reports of last meeting were read by the Secretary, G. A. Bagley, M. D., of Chelsea, after some other preliminary business.

Several members of both the Eclectic and Allopathic profession pressented themselves for membership. After appearing before the censors and passing a successful examination they were duly elected as members to the Society.

Delegates from other State Societies were present, and participated in the exercises, also eminent members of the Eclectic medical profession were present from England and other foreign countries.

Some very interesting essays were read by the members of the Society.

The attendance at the meeting was the largest of any Medical Association ever held in Vermont. After reports from various Medical Colleges and Societies, the meeting adjourned until the next annual meeting to be held at Montpelier the first Wednesday in June, 1867.

G. A. Bagley, M. D., Recording Secretary.

(This Society was incorporated by the Legislature of Vermont on the 8th day of November, 1836.—Ed.)

Miss Garrett, L. S. A.

A dispensary has been opened for diseases of women and children, which is to be placed under the active medical superintendence of Miss Garrett. In the course of the proceedings addresses were delivered by Mr. Russell Gurney and Dr. Billing. So far as they are reported in the brief accounts which have come under our observation, we may express our concurrence in the views expressed. Miss Garrett has surmounted the great difficulties which surround the attainment of a complete medical education for women with singular energy and perseverance, at great cost, and after long years of arduous labor. She passed an excellent examination at the only board which could or would examine her, and she is as well entitled to practise as any one in the kingdom. The position which she has taken up is entirely exceptional, and corresponds with that which we assigned to her as of necessity. She has settled in a great centre of population, and aspires to a special practice amongst women and children. This we believe to be the only condition under which females can successfully practise medicine. It is one which will always limit their number. for only a few people are fitted for such a position; and the competition which they must undergo in practising a specialty amongst large populations is of a severe kind. There is only room for a few practitioners, and those of the highest qualifications. In this exceptional career Miss Garrett is a pioneer, and is entitled to great credit for her earnestness and energy. How many will or can successfully follow her example, or what would be the likely result of their endeavor to do so, we refrain from prophesying. But we recognize in her efforts a legitimate desire to enlarge the sphere of female usefulness, to add to their means of self-support, to cultivate their mental powers, and to secure for them opportunities of achieving independence, and, perhaps, intellectual distinction —objects in which we heartily sympathize.

Scientific Martyrdom.

The most serious lesson to be deduced from the very painful and most lamentable catastrophe which has resulted from Mr. Toynbee's experiments upon himself, is the great danger of such individual self-sacrifice. It is not the first time that eminent members of our profession have, even lately, jeopardized their lives by trying experiments upon themselves with dangerous and poisonous substances, of which the doses and effects had not previously been sufficiently ascertained by experiment upon the brute kingdom. Dr. Christison was very near killing himself in testing the effect of the recently introduced Calabar bean upon his own organism, and rather carelessly beginning with a large dose of the powdered bean. He was paralyzed and incapable of articulation, helpless, although conscious, and was as nearly face to face with death as a man well can be and yet escape its jaws. Sir James Simpson nearly fell a victim to his experiments with anæsthetics. There is something heroic and grand in such a death as that of Mr. Toynbee. He is truly a martyr to his earnestness of purpose and generous zeal for the advancement of a beneficent art. No soldier in the line of battle, no saint steadfast in theological fidelity, ever lost his life in a purer or nobler cause. But heroism which involves such a sacrifice is only perfectly sanctified by a proved necessity; and although some risk must always be run by the original investigators who prove the effect of untried agents upon themselves, yet a risk so great as this might have been avoided; and in grieving over the fate of Mr. Toynbee, in exalting his self-sacrifice and his earnestness of purpose, we cannot omit to deduce from his sad though noble fate a caution which other investigators will hardly fail to take to heart.

HORSEFLESH, for the future, under certain regulations, is to be permitted for sale to the Parisian eating-house keepers. They must publicly notify their use of the *viande de cheval*. Special slaughter-houses are to be appointed, and diseased horses are forbidden by the ordinance. A veterinary inspector must attend at killing times, and the *morceaux* are to have affixed to them a stamp.

ANTIDOTES FOR STRYCHNIA.—Prof. R. Bellini, after conducting a long series of experiments on poisoning by strychnia and its salts, arrives at the conclusion that the best antidotes are tannic acid and tannin, chlorine, and the tinctures of iodine and bromine. These, he maintains, do not act chemically on the poison, but only through the astringent effects produced by the acid on the mucous membrane of the stomach.

GEUM VIRGINIANUM IN DYSENTERY.—Dr. W. A. Gibson, of St. Louis, in a communication to the St. Louis *Medical Reporter*, thus speaks of the virtues of this plant: "The root is astringent and slightly bitter, very much resembling in taste the blackberry root. I have been using a decoction of the root and plant in dysentery for more than ten years, and I think it worthy of a place in our dispensatory. I require my patients to drink freely of the tea thus made, using it in lieu of water, which I always forbid if cold. I never, in my experience (which has been large in this disease), knew a patient with dysentery to take a large draught of cold water who did not desire to go to stool immediately. While practising in the country, my attention was first called to the virtues of this plant by the farmers. Many of the country people, appreciating its value, entirely ignore the idea of calling in a physician in a case of dysentery, but rely entirely on this remedy, and candor compels me to say that I believe they have oftener gained than lost by this course. I have seen many bad cases of dysentery successfully treated with this remedy alone."

MEDICAL ATTAINMENTS *versus* SOCIAL TALENT.—Young physicians often dream that by extending the circle of their private acquaintances they thus afford themselves the best chance of extending the circle of their private patients. No view could be more chimerical, no error more fatal. No man will in any case of doubt or danger intrust to your professional care the guardianship of his own life, or the lives of those dear to him, merely because he is on terms of intimacy with you. Make yourselves known, but let it be for your professional acquirements. You must be respected not merely in your character of a social friend, but in your calling as a physician. The accomplishments which may render you acceptable in the parlor are not always those which would make your visits longed for and valued in the chamber of sickness.—*Prof. J. L. Crawcour's Valedictory Address to Grad. Class of N. O. School of Med., Session* 1865–6.

THE CHOLERA, in its first visitation of the civilized world, broke out in the following places at the dates annexed: at Moscow (Russia), Sept. 28, 1830; Sunderland (England), Oct. 28, 1832; Quebec (America), June 8, 1832; New York, June, 28, 1832; Philadelphia, July 30, 1832; Louisville, Sept. 18, 1832; Cincinnati, Sept. 30, 1832; Nashville, Dec. 18, 1832. In Cincinnati the cholera had ceased almost entirely on the first of December, and there was none of it (unless, perhaps, two or three cases) during the winter of 1832–3. In April or May next, it again broke out, and prevailed in Cincinnati with considerable activity during the summer. In the winter it was again silenced; but in the summer of 1834, again broke out; but in the latter part of the season was absent entirely; when, on a certain day in October, it again burst out in a large number of cases in one night, after which it entirely disappeared.

◆

OBITUARY.

THE death of Dr. R. W. GIBBES, of Columbia, S. C., is announced as having taken place in that city on the 15th inst. Dr. GIBBES was born in Columbia on the 8th of July, 1809, and graduated from South Carolina College in 1827. He studied medicine, married a daughter of JAMES S. QUIGNARD, and settled in his native city, where he lived a life of usefulness for nearly forty years. He was twice Mayor: and at one time acted as assistant professor of chemistry at his own *alma mater* with such success that he was offered a professorship, which he declined. His tastes and habits were literary and scientific, and he contributed largely to the medical and scientific journals of the country. His name is honorably mentioned by HUMBOLDT in his "Kosmos," and by AUDUBON in his Ornithology. The Smithsonian Institute tendered him the publication of his plates on paleontology and fossil remains at the cost of the Institute. He was also the author and compiler of several volumes of the Documentary History of South Carolina. He was eminently public-spirited; and to escape heavy loss, it became necessary for him to become the publisher of *The Columbia South Carolinian*, which he edited for several years. He lost severely by the burning of Columbia—his fine mansion, with its valuable collection of paintings, fossil remains, and geological specimens, falling a prey to the flames. He leaves a numerous family of sons, daughters, and grandchildren.

Dr. DANIEL BRAINARD, of Chicago, a distinguished surgeon, and Professor in the Rush Medical College of that city, died of cholera, on Wednesday, the 10th inst. He had but recently returned from a prolonged absence in Europe.

Dr. BRAINARD had long occupied a prominent position in his profession, having for many years been a leading teacher of medicine in Chicago, a surgeon of considerable ability, and for some time editor of the *Chicago Medical Journal.* The lectures in the Rush Medical College were suspended a week, in consequence of his death.

AMERICAN

ECLECTIC MEDICAL REVIEW;

A Monthly Record of Medicine

AND

THE COLLATERAL SCIENCES.

Vol. II. JANUARY, 1867. No. 8.

ORIGINAL COMMUNICATIONS.

The Progress of New Medicine.

BY PROF. J. MILTON SANDERS, M.D., LL.D.

Professor of Organic and Physiological Chemistry in the Eclectic Medical College of the City of New York.

> Some deference is due to that which the lapse of time has rendered venerable; but a gem dug from a modern, is equally valuable with one that is taken from an ancient mine.
> BOILEAU.

> How insignificant is the gain to science, even in the case of men of the finest intellects, when they renounce the aid of chemical and physical knowledge. LIEBIG.

ALL those inquiries which are recondite, and require the *vivida vis animi* forcibly enough to trace their relations from the concrete or special to the abstract or generalized, call so strongly upon our inertia, that few persons are willing to yield to this draft upon their industry. In the more delightful field of experimental science the laboring chemists have brought forth facts rich, rare, and really multitudinous; but they are the separate links of a chain whose fragments needs must be put together, ere we can expect to trace its meanderings through nature, and to derive from it that charming enjoyment which the knowledge of generalized truths can only impart to us. To the chemical philosopher belongs the task of methodizing a great variety of phenomena, relating principally to the synthesis and the decomposition of substances.

There is an intimate relationship existing among many bodies whose physical qualities are entirely dissimilar, presenting in no quantitative difference, a wide and well-measured qualitative one. These isomeric substances are rapidly accumulating, but they do not present such a formidable aspect as they formerly did, ere we had gained such a clear insight into the rational formulæ of compounds. Our future Materia Medica will be rich in these combinations, and it behooves the physician to study thoroughly their rational formulæ, if he would be capable of comprehending their therapeutic qualities.

The vegetable world has presented us with a great variety of alkaloids, and whose medicinal qualities are of the greatest value. Only a moiety of these have yet been discovered. The vast flora which surrounds us will furnish work for the chemist for years, ere he eliminate from their crypts the various medicinal principles they contain. But in the meantime the discoveries in organic chemistry are evolving every day substances resembling the active principles of plants, and in some instances almost isomeric with them. That these latter principles will prove of the greatest value in medicine, there is not a doubt. If the rational formulæ of two substances, one eliminated from a plant, and the other from the alembic of the chemist, be the same, the therapeutic effect will undoubtedly be similar. If their composition be slightly dissimilar, a corresponding dissimilarity of medicinal effect may be expected, but the advantage may be in favor of the artificial preparation. Or in other words, we wish to be understood as meaning that artificial preparations are none inferior in therapeutic value to the natural substances similarly constituted, only so far as their molecular condition may disagree. It does not require that the groups of atoms comprising an organic alkaloid, shall necessarily pass through a vegetable organism ere it shall have acquired medicinal properties. There is contained in their complex molecule no occult property imparted by the vitality of the vegetable cell; but simply the peculiar grouping of the four atoms of carbon, nitrogen, hydrogen and oxygen, wholly determines its value upon the system as a curative agent. Hence the great value of the new alkaloidal bases which are being daily discovered by the chemist. Their constitution is analagous to the natural ones; while their preparation is devoid of those interfering substances whose presence causes failures, and involves the exercise of so much skill and patience. While, therefore, we do not wish to underrate the natural remedies, we are desirous that the artificial ones shall be recognized equal to their deserts.

The preparation of the artificial bases no doubt implicates the same play of chemical affinities that nature involves in the formation of the natural ones. Ammonia and ammonium are the substances which furnish the nitrogen, and which likewise furnish the displaceable hydrogen. Ammonia is therefore the type of these compounds, and it is from its hydrogen, or that of water, that these proximate principles derive all of that element. It is through the readiness with which the hydrogen in ammonia is displaced that these complex compounds are grouped: and this may be the cause of their formation, both naturally and artificially.

The complexity of the composition of these substances is due therefore to the number of hydrogen atoms displaced. If all of the atoms of hydrogen in ammonia, or ammonium, or in several molecules of these substances, be displaced by complex radicals, the composition of the compound must be correspondingly complicated. It has been only lately that the chemist has been enabled to build up, or to form compounds of greater complication from those less so. These discoveries have emboldened the chemist, and his aspirations are correspondingly elevated.

We will adduce a peculiar substance derived from the action of sulphuric acid upon bran. It is an oily substance and volatile. If this oil (Furfurole) is acted upon by ammonia, a crystalline compound is produced which is termed *Furfurolamide.* Its formula is $C_{15}NH_6O_3$. This equation will represent the reaction:

$$\overbrace{C_{15}NH_6O_3}^{\text{Furfurole}}+NH_3=3\overbrace{HO+C_{15}NH_6O_3}^{\text{Furfurolamide}}$$

This Furfurine is a powerful base, and will even displace ammonia. It is very caustic, and forms beautiful salts with the acids. We adduce this substance for the purpose of comparing its composition with the natural alkaloids; and likewise as an instance of the building up of a complex substance from that which is less so. The nitrate of Furfurine is intensely bitter, and is possessed of febrifuge properties fully equalling those of quinine. The composition of Furfurine very nearly approaches to several of the natural alkaloids, and its salts have the medicinal effect of the salts of those substances.

The discovery that to the nitryl bases another compound radical may be combined, thus not displacing a fourth hydrogen atom in ammonia (as the latter contains it not) but the fourth atom in ammonium, has led to the production of a series of bases that very closely approach the natural ones. These bases may not have the exact therapeutic properties of the latter, but they may not only prove very dissimilar in their action upon the system, but more valuable. Now unlike the bases derived from the displacement of the hydrogen in ammonia by the compound radicals, those derived from ammonium are very stable. These latter bases therefore contain oxygen, which assimilates them to many of the natural alkaloids. As these bases are of the greatest moment to the physician at present, we will give a few samples of their constitution:

$$\text{Ethyl}\left\{\begin{matrix} C_4H_5 \\ C_4H_5 \\ C_4H_5 \\ C_4H_5 \end{matrix}\right\}N \quad \textit{Tetrethylium}$$

The composition of this compound is therefore $C_{16}H_{20}N$, and hence is very complex. But there are others still more so. For instance:—

$$\text{Amyl}\left\{\begin{matrix} C_{10}H_{11} \\ C_{10}H_{11} \\ C_{10}H_{11} \\ C_{10}H_{11} \end{matrix}\right\}N \quad \textit{Tetramylium.}$$

The composition of this compound being $C_{40}H_{44}N$.

The above are only adduced as illustrations of the manner in which these complex compounds are built up. They are formed upon the type ammonium, or the oxide of this compound metal, by the substitution of the atoms of its hydrogen by compound radicals, as the above formulæ illustrate. In the examples just given, the hydrogen atoms are all displaced by the same compound radical, but the substance may be more complex still, by the displacement of each hydrogen atom by a different radical. For instance, the very complex compound, involving the equally formidable and complex name *methylethylamylophenylium*, is thus formed :—

$$\left.\begin{array}{l} \text{Methyl..}C_2H_3 \\ \text{Ethyl.....}C_4H_5 \\ \text{Amyl.....}C_{10}H_{11} \\ \text{Phenyl...}C_6H_7 \end{array}\right\} N$$

where the hydrogen atoms of ammonium are necessarily displaced by the compound radicals Methyl, Ethyl, Amyl and Phenyl, forming a compound containing twenty-two atoms of carbon, twenty-six atoms of hydrogen, and one atom of nitrogen.

It should be recollected, that so far, the chemist has only succeeded in forming a series of bases, built by the substitution of the above four radicals for the hydrogen in Ammonium. There is no doubt but that in time other radicals will be discovered, and that other series of complex substances will be built up, containing these new radicals.

The prospect before us is therefore boundless. Fields rich in grand discovery are spread out in the future, and it only requires application, controlled by the proper guidance of science, to render our future researches of incalculable advantage.

It was but a brief time ago that chemistry was a mere mass of disconnected facts, collected together without method or generalization. Each fact was, it is true, a gem worth the preserving, but still of little value compared to its intrinsic worth when set in its true place in that priceless whole which comprises a generalized series of phenomena. These *disjecta membra* have been of late thoroughly studied by able intellects. Their true places in the series of coördinated phenomena have been ascertained, and hence a greater importance given to them in their connected form. Mere postulates, likewise, have yielded to well-ascertained truths ; and hypothesis and wild theory, after having been subjected to the test of rigid research, have been swept away among the rubbish of the past.

This is the present state of chemical science. Deep, sagacious and well-trained intellects have taken the old science in their possession. Its processes have been methodized — its potential theories have been verified, or, unsusceptible of standing the rigid test of philosophical scrutiny, have yielded to others more in conformity with true scientific induction. In this purifying process, some cherished theories have been violated, thereby discomposing the rhapsodies of some elderly savants of fossilated ideas. With mutterings about innovations, and complainings of the restlessness of young chemistry, those venerable philosophers have stepped aside, and given place to severe, vigorous and intellectual conceptions — and now the great science of chemistry is progressing rapidly onward to those new fields of inductive research, where its true destiny will be fully recognized by the astute minds that are destined to adorn the future.

It is in the fields of medicine that future research will exhibit its greatest glory. As the true rival of nature herself, the chemist will produce innumerable substances of very complex composition ; and as their constitution will imply, they will be possessed of powerful effects upon the system. As quinine acts to remove febrile effects, so will some of these substances, with equal potency and certainty, remove other forms of disease that have before resisted all the remedies administered for their cure. Let us not be accused of undue enthusiasm, for we merely assert these things as truths soon to come before the world. Science has now reached that stage of advancement, when our prophetic language must soon be realized. We frequently observe that as science progresses, it reaches certain stages, where facts of startling import are ripe and must have vent. Simultaneously, and in various countries, these facts are brought to light, for their place in the chain of events has been reached, and their birth is a necessary corollary in the progress of science. As the science of chemistry has strode grandly along, its progress has at length necessitated that its greatest destiny should be revealed. To the Arts it has presented secrets rich and rare, but to Medicine it has preserved a reticence that is in singular contrast to its communicability to the former. But the time has arrived when the more recondite efforts necessary to produce the required facts for medicine, are about being made. A new Materia Medica will soon be created, partly derived from the vegetable world, but mostly from the alembic of the chemist. In the inscrutable recesses of the laboratory, there will be born a remedial potency which is destined to regenerate medicine; and then the contention for supremacy will be between the stills and retorts of the laboratory, and the cells of the living plant. And that the former will in the end win the prize, is strongly supported by the rapid progress of science.

Then let us have hope, for the effete remains of Old Medcine are being regenerated, and like the volatile matter of putrefaction, its debris is destined to build up new forms, that, in the guise of New Medicine, are destined to play the most important part in the great task of medical progress.

New York, December, 1866.

On the Anatomy, and some of the Surgical Diseases of the Urethra.

BY EDWIN FREEMAN, M. D.,

Professor of Anatomy in the Eclectic Medical College of the City of New York.

Diseases of the prostatic urethra are various and quite numerous, and owe their origin mostly to extension to it from adjacent portions of the urethra, but partly to diseased conditions of the dense glandular structure surrounding it.

Inflammation, either acute or chronic, may result from an extension backwards of gonorrhœal inflammation from the extremity of the urethra, or from preëxisting stricture of that portion of the urethra lying in front of it, leading to the production of inflammation and disorganization of all the parts posterior to the stricture. Strong injections, cauterizations, mechanical injury, either by the catheter or otherwise, calculi of the bladder, indulgence in venereal excesses, cold, taken by sitting long on the cold damp ground, inflammation of the bladder, &c., are causes that may produce inflammation of the prostatic urethra When it commences in the urethra, it usually extends to the glandular structure, and when the latter is the first involved, the urethra seldom escapes. Chronic inflammation may be the sequel of the acute, or it may be induced in persons of a low grade of vitality, and is more liable to be simple and uncomplicated with that of any other parts of the canal than the acute form.

The *morbid appearances* presented in the acute disease, are, at first a deeper red tint of the surface, and then, as the inflammatory action continues, the mucous membrane becomes thickened and velvety; or has patches of organized lymph adhering to its surface. Sometimes it becomes ulcerated or gangrenous in patches, which appear as the openings of abscesses in the prostate gland, the result of inflammation of that structure.

In chronic inflammation, the prostatic urethra is often expanded, the mucous membrane thin, and the mouths of the prostatic ducts dilated, where there is a stricture in front; but it may be thickened and coated with organized lymph, appearing opaque and rough, when there is no stricture. The gland itself may be thickened, and appear a dull ashy gray or slaty hue, instead of the deep red of acute inflammation, showing a long, persistent, unhealthy action.

The *symptoms* of the acute form are, pain and uneasiness apparently at the neck of the bladder, with a disposition to pass water more frequently than is natural, and an increase of the pain during the act, especially as the last is passing.

The stream is small, and the pain so severe as to sometimes cause a complete stoppage from a spasm of the muscles of the part. There is much straining, and perhaps a few drops of urine will pass, from the spasm slightly relaxing. If the gland be involved, it is swollen, tender, throbbing, and can be felt by the finger in the anus, in front of the bowel. There is pain in defecation and tenderness of the perineum, and if it terminates in abscess, there will be much throbbing, pain in the back and loins, running down the thighs and in the glans penis, and frequent desire to go to stool. If the catheter be introduced, it will excite intense pain in the inflamed locality. The symptoms of uncomplicated chronic inflammation of the prostatic urethra are not so strongly marked. There is a little undue frequency in making water, no pain in micturition until the last few drops are passing, and then slight pain, produced by squeezing the tender mucous membrane in the act of closure of this part of the canal. Passing of the catheter gives more than usual pain, when it reaches the prostate gland. There will often be a passage of muco-purulent matter and masses of epithelium from the urethra, either with the first urine voided, or like a gleety discharge, especially if the prostate gland be involved. In the latter condition there are local pains, tenderness of the perineum, and of the prostate itself, on rectal examination. Frequently there is chronic enlargement of the gland, resulting from this inflammation, which may be diagnosed from hypertrophy, by its being the result of inflammation, and by its occurring in the early or middle periods of life. Sometimes the patient has little or no sexual desire, and he may be the subject of frequent involuntary nocturnal emissions, which are generally not seminal, but the product of the increased excitability of the prostate gland.

Treatment:—In the acute disease the lower bowel should be thoroughly emptied by enema; and a warm sitting bath, with accompanying hot foot bath of from ten to fifteen minutes, should be administered, to be repeated as often as seems indicated. The patient then should be wrapped up in bed and thorough diaphoresis and relaxation effected. It is sometimes useful to give Beach's anti-bilious physic combined with the lobelia powder, a quantity of tea made from it, and given hot and in broken doses, until the system is relaxed, the patient sweating, and there is a disposition to stool. A small quantity of a solution of extract of opium with starch water, thrown into the bowel, will often quiet the pain and uneasiness. The irritating qualities of the urine may be suppressed by tea of the Altha Off. or Ulmus Fulv. with Uva Ursi, or Buchu, and free doses of Acetate of potassa, or Liquor potassæ, to neutralize the acidity of the urine. Full doses of Gelseminum may be given for its relaxing and anti-inflammatory effect, or it may be given in combination with small doses of Aconite and Belladonna or Hyosciamus. The diaphoretic powders of the Eclectic Dispensatory, in full doses every three or four hours, will keep up the diaphoresis well, and keep the patient comparatively quiet. In addition to the hip baths a large hot poultice of hops may be applied to the perineum, after the patient is put to bed, and a strong sinapism to the back and hypo-gastric region, also to the inner sides of the thighs. The patient must be kept quiet for some time after all the active symptoms are subdued, or he will suffer a relapse.

In the chronic form of this disease, the vigor of the system must be supported by the use of tonics and generous diet not actively stimulating. Iron and Quinine with extract of Nux Vomica make a good pill. The prostatic urethra should be washed by a solution of the nitrate of silver of the strength of from two to twenty grains to the ounce of pure water. This is especially beneficial if there be noctural emissions. The solution may be introduced by means of a catheter, perforated at the extremity and containing a piston, by means of which the fluid can be forced into the urethra as soon as the catheter shall have arrived there. The pain may be temporarily increased by that operation for even a day or more, and blood may pass, but then those effects usually subside with a decided relief of the old symptoms, especially if in the meantime the patient drink freely of a tea of the Altha, Agrimonia, or Uva Ursi. The operation may or may not be repeated, according to the indications, but at any rate not for three or four weeks. Counter irritation to the perineum with croton oil or the cantharides collodion, is very useful; or the irritating plaster (Ec. Disp.), applied there or to the inner sides of the thighs, affords powerful counter irritation, without the danger of the irritating effect from absorption of the Cantharides. When the trouble is a sequel of acute inflammation, and there is tenderness and enlargement of the prostate gland: in order to reduce the enlargement, it is well to resort to the internal administration of the Iodide or Bromide of potassium. Either of them may be given, as it agrees best with the stomach, and it may be combined with the acetate or bicarbonate of potash, if there be marked acidity of the urine, or with any of the vegetable alteratives, such as syr. stillingiæ comp., tinc. corydalis comp., Phytolaccin, Macrotin, &c., alone, or in pill with Iodine. The iodine ointment introduced upon cotton into the rectum, or iodine painted on the perineum will assist materially in reducing the induration and enlargement.

If there be complete retention of urine from this cause, which cannot be overcome by the means referred to, a silver catheter must be carefully introduced, keeping the extremity of the catheter well against the upper wall of the urethra, as it courses under the arch of the pubes; so that it will enter the prostatic urethra with as little difficulty as possible.

Abscesses may form in the prostate gland, and burrowing around the urethra, may completely separate it from other structures, and at last opening into the canal, be discharged; or they may possibly open simultaneously also into the rectum, and urethro-rectal fistulæ be established. Those openings may close up spontaneously, or they may remain open, and the urine passing out of the urethra, may cause an increased formation of matter, which may escape in the usual manner, or find another outlet on the surface of the perineum. The treatment should be mainly supporting treatment; and with the exception of means to subdue inflammatory conditions and the occasional washing of that portion, or the urethra with a weak solution of nitrate of silver, or the sesquicarbonate of potassa, little interference should be made, but allow time for nature to effect a resolution of the case, by a cure of the abscess. Where catheterization is deemed necessary, it of course must be used, being careful that it does not enter the abscess, instead of the bladder, through the urethral opening. If perineal incision holds out some chance of cure, where other means fail, it should be performed.

Ulceration of the urethral mucous membrane of the prostate may occur from the pressure of a catheter where it has remained in the bladder for a too long time; also from the softening of a tubercle situated in the membrane; or the sprouting of a malignant growth; or impaction of a calculus, either entire or in form of a fragment. It may also occur from urinary retention from stricture dilating the canal, and thinning the membrane, which finally ulcerates. In this last case the cure of the stricture allows the ulceration to heal. In the former constitutional and local treatment for chronic inflammation such as has already been referred to will generally be all that is sufficient to effect a cure, except in malignant ulceration, in which case a caustic application should be made by means of Lallemand's instrument for cauterizing the urethra.

No. 93 E. 17th st., New York.

[*To be continued.*]

On the Identity or Plurality of Syphilitic Poisons.

BY JAMES A. HENSHALL, M. D.

AN interesting discussion has lately arisen in Europe, both in Great Britain and on the Continent, in regard to the exact nature of the Syphilitic poison, or poisons. The disputants are divided into two classes, known as *unicists* and *dualists*.

The unicists are those who believe in only *one* syphilitic virus, which they claim is specific in its effects, and capable of producing any, or all of the varieties of chancre, and their respective sequelæ.

The dualists, on the other hand, are those who advocate the theory of *two* totally distinct and unique syphilitic poisons, each producing effects characteristic of, and peculiar to itself; the one invariably producing soft chancre the other as infallibly propagating indurated chancre. They further claim that soft chancre is an entirely local, and comparatively harmless affection, incapable of infecting the general system, or of producing secondary accidents; but that hard, callous or indurated chancre is the true syphilitic sore, and which alone is responsible for constitutional syphilis.

Before giving my opinion in regard to the above propositions, it is worthy of remark that this dualistic theory was not generally advanced and advocated, until after mercury had come into general disfavor, and had lost its prestige as a specific in syphilis. It was not until after the facts had been demonstrated and proven, that syphilis could be cured without mercury; and that mercury was not only useless, but positively injurious in the treatment of that disease; and that a long train of symptoms which had been formerly attributed to syphilis, were in reality the effects of this vaunted anti-syphilitic Samson itself;—it was not, I say, until after all this had been proven that the plurality theory came into vogue. Now, there was, evidently, some reason for this. Yes, there was a reason for it, and I will endeavor to show when, how, and why this double-headed phenomenon dualism, arose from the ashes of the mercurial phœnix.

There is a remarkable coincidence, in certain peculiarities, between this question of the identity or plurality of syphilitic poisons, and the great question of change of type in inflammatory diseases,—thus we find that the unicists are, with few exceptions, non-mercurialists, and are opposed to the change of type theory; they are in fact the eclectics of Europe. They maintain that syphilis is the same disease now, that it always has been, as pneumonia is the same yesterday, to-day or to-morrow; that the revolution that has taken place in the treatment of both diseases, was occasioned—not by a change in the character of the diseases themselves—but because their former treatment had been proven, by the advance of the science of pathology, to have been erroneous. The same cause which led to the abandonment of the lancet, tartar-emetic, and mercury in febrile and inflammatory diseases, also led to the repudiation of mercury in syphilis. As it was proven that the antiphlogistic plan of medication increased the mortality in fevers and inflammations, so has it been proven that the mercurial treatment of syphilis, not only does not cure, but really aggravates the disease, and makes bad worse—or, as the French have it, *de mal en pis.* The unicists accepted the situation, came out boldly, and honestly, and acknowledged the error of their former treatment, and adopted the more rational views of modern science.

The dualists are, almost to a man, mercurialists, and also advocate the change of type theory, for the same reason that they defend the dual theory of syphilitic poisons. When they were forced by the advance of medical science, and by public opinion to abandon their cherished antiphlogistic remedies in febrile and inflammatory diseases, and to adopt a plan of treatment more in accordance with the present knowledge of pathology, they were, of a necessity, compelled to furnish some pretext to explain away their apparent inconsistency; not being honest enough to acknowledge their former error, this they attempted to do, by inventing the change of type dogma, by which they vainly strove to prove that diseases had changed from a former sthenic type, to a present asthenic one; and that in the former case the antiphlogistic treatment was the proper one, but inasmuch as the type of disease had changed, they claimed, they accordingly had changed their treatment. So, also, when it was demonstrated that mercury was *not* a specific in syphilis, but that it was absolutely injurious, and the liberal portion of the profession had acknowledged the truth of this, and had repudiated its use,—then do we find these dualistic heroes in the breach, still battling for error; and when at last they are obliged either to conform to the new order of things, or be crushed beneath the toppling walls of error and untruth,—they look around, as in the former instance, to discover some hole to get out at; and they are fortunate enough to find the loop-hole of duality of syphilitic poisons.

It had long been observed that soft chancre was more easily managed, and that secondary accidents happened less frequently, or in a milder form, than in the case of indurated chancre—and the reason for this was supposed to depend upon some peculiar idiosyncrasy existing in the individual affected; here then was the straw so eagerly grasped by the dualists to keep themselves afloat. The soft chancre, said they, is not syphilis—or at best a non-virulent form of it—and can be cured without the aid of mercury; in fact, said they, it seems to be contra-indicated, for it is in these cases that you witness these deleterious effects of mercury; but hard chancre is the veritable animal *de facto*, *de jure*—and mercury alone can cure it. And now, though they are debarred the pleasure of mercurializing the softs—they still have the consoling reflection, and mournful satisfaction of knowing that they can double-dose the hards—and that after all

> There is but one (true) virus,
> And (hard) chancre is its (their) *profit*.

[The balance of this article is an extract from the ECLECTIC CLINICAL MEDICINE AND SURGERY, by J. A. Henshall, M. D., now in press.]

I will now endeavor to describe what I conceive to be the true theory of Syphilitic poison, as it now exists, and as it has always existed, from the days of King David, who, tradition leads us to believe, contracted the disease from the cunning Abigail, the wife of Nabal—down to the present time. By this theory can be explained and reconciled the many apparent contrarieties and inconsistencies exhibited by this disease, and which have always been deemed inexplicable.

I am convinced that syphilis has been "more sinned against than sinning;" that most of the fearful and loathsome effects attributed to this disease, have been produced by the agent so universally employed for its cure—*mercury*. We do not read so much of the horrible effects of the disease until after the time of Paracelsus, and the introduction of his famous *quack-salver;* and it is but fair to presume that previous to his time, syphilis was not attended with such baneful and pernicious consequences, as have since been ascribed to it. I am certain that syphilis, *cæteris paribus*, produces but few symptoms of severity, and is amenable to rational treatment; and that its tendency is to its own cure, in proportion to the constitutional vigor of the individual affected.

There has always been recognized two distinct forms of chancre—soft or chancroid, and hard or indurated, or as it is often called hunterian chancre; the former being the typical local or non-virulent sore, and the latter the true syphilitic, or virulent chancre of the dualists. They are described as follows, by one of the most prominent and enthusiastic supporters of the plurality theory in England:

" *The simple, soft, local venereal ulcer*, is marked by a process of active ulceration and suppuration, attended with inflammatory phenomena. Neither the ulcer or its cicatrix presents any well-defined and strictly limited induration; it discharges a purulent secretion which readily inoculates the neighboring parts, and the ulcers are often multiple or become so. If inguinal adenitis ensues, it is confined to one gland, which tends to inflame and suppurate. The disease manifests itself two, three, four, or rarely five days after exposure to contagion.

" *The indurating, infecting, or true syphilitic chancre*, is characterized by the adhesive form of inflammation; it is more or less ulcerative in character, but not by any means invariably so, the specific induration being sometimes formed *à froid* without inflammatory phenomena. This sore is generally solitary, or if multiple, it is so from the first, the base and periphery of the lesion possessing a well-defined but variable amount of induration. The concomitant adenitis is generally symmetrical, consisting of a chain of enlarged indurated glands, or indurated lymphatic vessels, and without any active inflammatory or suppurative action in them. The lesion appears from between five days to five weeks after contagion."

The above are very faithful descriptions of the two forms of chancre mentioned, and if syphilitic ulcers invariably presented either one or the other of the above-described series of phenomena, then the theory of the duality of syphilitic poisons would seem to possess some degree of plausibility; but unfortunately for the advocates of this theory, chancres present all shades of differences and varieties of appearances, from one to the other extreme of softness or hardness; and they themselves confess, but cannot reconcile the fact that with the more anomalous, mixed, and non-conformable cases, it is impossible to determine where one ends, or the other begins.

Now there is but *one syphilitic virus*, the same now, as it always has been, and ever will be, immutable and unchangeable; this virus will produce chancre (and now—so far as its identity or plurality is concerned—we are done with the *virus*). The nature, appearance, progress, and effect of that chancre will depend upon the constitutional condition of the person affected, and not upon the source of infection—the seed being sown, the development of the *plant* will depend upon the nature of the soil, not upon the seed sown.

Chancre, *per se*, is a strictly local disease, and can be radically and effectually destroyed by timely attention and prompt treatment; but if not so destroyed, the system becomes infected or poisoned, sooner or later; the virulence of the infection, and the length of time required, depending upon the diathesis or dyscrasia of the individual affected.

For instance, if an individual of a vigorous, untainted constitution be exposed to syphilitic virus, the resulting chancre will exhibit all the characteristic qualities of the typical soft chancre—described above—in an eminent degree, from the very nature of the circumstances. The inherent powers of the system—*vis vitæ*—will of course combat this poison, and dispute its absorption into the economy; the virus will then expend its strength upon the surface, and produce the nearest approach to a healthy ulcer known to syphilography—a soft chancre; which by proper treatment can soon be converted into a healthy sore, and rapidly healed. But if the virus effects an entrance—is absorbed—it is met by the *vis medicatrix naturæ* at the first defensible point,—the inguinal glands,—which will endeavor to throw out the poison at this point by suppuration, just as described above. The healthier the organization, the greater will be the inflammation, and the more active the ulceration and suppuration. Not only is this the case with syphilitic poison, but all other poisons and deleterious agents will be opposed in a similar manner by a healthy and vigorous organization.

If, on the other hand, the individual be of a well-marked strumous or scrofulous diathesis, the resulting chancre will present all the characteristics of the true hunterian ulcer, above described. The vitality of the system being impaired and diminished, and the natural resisting power of the system being feeble, we have, in consequence, the indolent, hard, and fungous ulcer peculiar to this dyscrasia; the virus will become rapidly absorbed—from the well-known activity of the absorbent glandular system in this diathesis—the inguinal glands very soon become affected, and exhibit the same conditions that inflammation of the lymphatic glands always present in scrofulous subjects, no matter what the exciting cause. The cervical lymphatic glands become involved in a remarkably short period of time—followed very soon by the mucous membranes and skin; all in turn succumb to the ravages of the poison, if unchecked in its career. Primary, consecutive, and secondary accidents follow each other with admirable regularity and unerring certainty.

As the constitution of the individual approaches one or the other of the two conditions described—so will the character and phenomena of the chancre resemble one or the other of the corresponding, so-called, typical ulcers. The healthier the patient, the softer and more tractable will be the ulcer, and the more strumous the diathesis of the individual, the more indolent, indurated and virulent the chancre.

These facts are very apparent, easily demonstrated, and will, by investigation, prove themselves. I can recall more than one instance where I have had two patients, at the same time, infected from the same source, one having soft, and the other indurated chancre; the first individual being of naturally a sound constitution, and the latter of a strumous habit of body. These facts being so patent, so simple, and so easily proven, it is the province of every physician to investigate them for himself. I will only add, that just in proportion as it is difficult to determine the strumous or non-strumous condition of the patient affected—just so will be the relative difficulty to determine whether the chancre be hard or soft, and this would naturally be expected under the circumstances.

Milwaukee, Wis., Nov. 28th, 1866.

Hereditary Influence.

BY CHAS. H. S. DAVIS, M. D.

That physical and mental qualities are transmitted from parents to offspring, has been noticed in all ages of the world, and, notwithstanding all the light which science has thrown upon the problem of hereditary transmission, we know but little more about it to-day than was known a thousand years ago. Whilst Chemistry, Geology, Natural History, Agriculture, &c., may almost be classed with the exact sciences, the study of man and the improvement of the human race remain enshrouded in Egyptian darkness. "When will the current of public opinion, or the stimulus of professional emolument, create a desire to understand the irreversible ordinances and statutes of nature, on this class of subjects, as strong as that which now carries a student of law through Fearne on Contingent Remainders?—a book which requires the same faculty for divining ideas, that Champollion had for deciphering Egyptian Hieroglyphics."* The bees build their combs now in the same way that they did a thousand years ago; man is the same to-day as he was in the days of the patriarchs—subject to the same laws, inheriting and transmitting mental, moral, and physical qualities; in fact, wherever we look, man is the same. Stripped of exterior coverings, there is in every climate a common body and a common mind; he is but "an atom of an atom world," and the generations of six thousand years, to beings of superior natures, appear like the successive tribes of insects, which, in the morning, sport on the surface, and, ere sunset, are lost in the bosom of the troubled lake.

---

* *Horace Mann's Lectures on Education*, p. 237.]

In reading the writings of Greek and Roman authors, and of writers during the middle ages, we meet with many instances of hereditary peculiarities. Plutarch speaks of a family in Thebes, every member of which was born with the mark of a spear-head on his body; Pliny says that Seleucus had an anchor on his thigh, so had his posterity; Lepidus was purblind, and so was his son; says Fernelius, "such as the temperature of the father is, such is the son's, and look what disease the father had when he begot him, his son will have after him."* So also Roger Bacon, "the son is as well inheritor of his infirmities, as of his lands; and where the complexion and constitution of the father is corrupt, there the complexion and constitution of the son must needs be corrupt, and so the corruption is derived from the father to the son.† Lemnius observes, that the affections of the Jews follow their seed, and the malice and bad condition of children are many times wholly imputed to their parents;‡ also, "that old men beget for the most part wayward, peevish, sad, melancholy sons, and seldom marry."

Constancy in the transmission of structure and character from parent to offspring is a law of nature; but variations occur. The striking opposition of character in families has been noticed from Cain and Abel, down to the brothers Bonaparte. Hereditary physique has its analogues in hereditary tone of mind; and it would not be difficult to adduce scores of instances in which scientific, literary, or musical talents have descended through several generations. Says Dr. Gregory, "Both bodily and mental qualities are hereditary. Parents are often revived in their offspring; certainly, children are like their parents, not only as to countenance and form of body, but disposition of mind, and virtues, and vices. The Claudian race flourished a long time at Rome, active, fierce and proud; the same produced the unpitying Tiberius, a most sad tyrant; at length, after 600 years, about to cease in an outrageous Caligula, and Claudius, and Agrippina, and lastly a Nero himself."* Julius Cæsar was of a race prolific in masterly talent, and of an age adorned with the highest attainments of the intellect.

---

* "Quale parentum maxime patris semen obtigerit, tales evadunt similares spermaticæque partes, quocunque etiam morbo Pater quum generat tenetur, cum semine transfert in Prolem." *Fernelius Ut. arthritici Epilep.*, *&c.*

† *Roger Bacon*, *Epist. de secretis artis et naturæ*, c. 7.

‡ "Affectus parentum in fœtus transeunt, et puerorum malicia parentibus imputanda." *Lemnius*, *De occult. nat. mirac.*, *lib.* 4, *cap.* 3.

We know that Milton inherited his musical talents from his father; may he not also have inherited his blindness from his mother? Aubrey tells us that she had such weak eyes, that, before she was thirty years old, she had to wear spectacles.

Dr. Johnson not only inherited the mental characteristics of his parents, but also the scrofula. Mozart inherited the musical genius of his father.

Letitia, the mother of Napoleon, though advanced in pregnancy, left her domestic duties to accompany her husband in all the perils and fatigues of that conflict which terminated in Corsica becoming a province of France, and its inhabitants subjects of the Bourbons; eight of her children lived to find their name the terror and admiration of the world.

The strong sensuality of James the First must be ascribed to both his parents, whilst his partial idiocy and nervous trembling were, doubtless, caused by the terror which his mother experienced at the brutal murder of Rizzio.

In the Sheridan family, generation after generation have succeeded to the heritage of extraordinary talents. Byron's paternal ancestors were remarkable for their eccentricities, irregular passions, and daring recklessness; and his mother was liable to ungovernable outbursts of temper and feeling. The deformity of Byron's foot and leg indicated that a nervous attack occurred during intra-uterine life, of a paralytic or spasmodic character. Bernard Tasso was a considerable poet, and his son Torquato inherited his faculties, heightened by the influence of the mother.

---

* *Conspectus Medicinæ Theoreticæ, cap.* 13, XVI.

The two Herschels, the two Colmans, the Kemble family, the Coleridges, and, in our own country, the Beecher, Van Buren, and Adams families may be mentioned where extraordinary talents have descended from father to son—

———" puerique claris
Patribus orti."*

In comparison with the above, we may ask, how is it that Pericles, who "carried the weapons of Zeus upon his tongue," produced nothing better than a Paralus and a Xanthippus? How came the infamous Lysimachus from the austere Aristides? How was the weighty intellect of Thucydides left to be represented by an idiotic Milesias, and a stupid Stephanus? Where was the great soul of Oliver Cromwell in his son Richard? Who were the inheritors of Henry IV, and Peter the Great. We read of Chaucer's son, of Dryden's sons, of the sons of Burns, of Allan Ramsay's son, of Dr. Young's son, of Campbell's son, of Moore's son, and of Shelley's son; Milton, Addison, Shakespeare, and Byron, left daughters.

One half of the most eminent persons that have ever lived in the world of science and literature have remained unmarried. "The best works," remarks Lord Bacon, "and of greatest merit for the public, have proceeded from unmarried or childless men." Among the fathers of the early Christian Church, even before the law of celibacy was introduced, almost all the most eminent were unmarried men; among these were Clement, Irenaeus, Justin Martyr, Ignatius, Polycarp, Origen, and a host of others. Butler, Cowley, Congreve,

---

* *Horace, Lib. IV, Car. VI.*

Otway, Prior, Pope, Gray, Thomson, Cowper, Akenside, Shenstone, Collins, Gray, Goldsmith, and Rogers, all died unmarried. Says Walker, " History proves that marriage is essential to the well-being of human society, and that celibacy brings ruin upon states. Marriage and population increase in young and vigorous nations, both diminish in nations which are falling into decay. " * Having shown that mental, moral, and physical peculiarities are transmissible, let us go back to the beginning, and the question that first arises is one that has been asked thousands of times, Shall we consider constancy, in the transmission of structure and character from parent to offspring, as a law of Nature, or as the result of mere chance ? A superficial view of the subject might lead one to think that we were governed entirely by chance, instead of inexorable laws. Says a writer, " A halfpenny's worth of nitrate of silver skilfully applied, and France might have been spared many of the horrors of her last century revolutions." By a trifling loan of money from the great actor Talma to Napoleon in a time of need, the face of Europe was changed—millions of men perished—thrones were emptied—Wellington was made a duke—Moscow was burned, and France made a despotism at the present time. American liberty and thirty-one glorious States arose from a strong cup of tea made by the Bostonians in 1775. A little piece of magnetized steel led to the discovery of a new world. The erection of a saw-mill in California changed the currency of the world. The exportation of a few potatoes from America, by Sir Walter Raleigh, has saved the Irish nation several times from starvation.

" Did this man sin, or his parents, that he was born blind ? " The Saviour replies to the inquiry, " Neither hath this man sinned, nor his parents : but that the works of God should be made manifest in him. "

But we hold that this department of Nature, in common with all her other works, is governed by the action of certain fixed and invariable laws ; that cause and effect reign uni-

---

* *Walker on Woman, p.* 107.

versal, and operate in producing every great, every minute quality in every child; that disease is the result of transgression of organic laws, and is not owing to chance result, nor the inflictions of an inscrutable Providence.

> "No action, whether foul or fair,
> Is ever done, but it leaves somewhere
> A record, written by fingers ghostly
> As a blessing or a curse."*

Says Machiavelli, "I am not ignorant that it is, and has been of old, the opinion of many people, that the affairs of the world are so governed by Fortune and Divine Providence, that man cannot by his wisdom correct them, or apply any remedy at all."†

Although the transmission of species is governed by certain inflexible laws, yet there are many variations to these laws. We have seen that the man of genius may have a blockhead for a son. In the same family we observe striking differences in stature, aspect, and disposition; children are sometimes not only unlike their parents, but they are in many particulars unlike their species. Pliny remarks "that nature is by no means regular in the procreation of the human race, so that parents rarely give birth to children that resemble themselves. Persons who are well formed have misshapen children; whilst those of deformed parents are well made. Mothers also give birth to children that sometimes resemble themselves, sometimes the father, and sometimes resemble neither one nor the other." Pliny mentions examples of six-fingered persons among the Romans: such individuals received the additional name of sedigitus or sedigita. C. Horatius had two daughters with this peculiarity.

Let us endeavour to ascertain if these variations can be accounted for, and also investigate some of the laws which govern the transmission of species. A writer in the Edinburgh Review, speaking of the community of function of the ultimate constituents of all organized beings, as far as they can be determined, says, "These constituents are microscopically minute hollow spheres of various forms, oblate, discoid, ovoid, spheroid,—containing small granular bodies termed nuclei. Such, and no other, is that primordial cell from which the perfect organism, whether it be animal or vegetable, is evolved, and within which operates that unconsciously acting principle of vitality which, from so minute and almost formless an atom of matter, works out the entire mechanism of frame in all its parts; so that, finally, beauty, fitness, and an admirable working to beneficent ends, is the result. Within the narrow walls of that hollow spheroidal atom is contained potentially the whole scheme, not only of the future physical life, but also of those instincts, faculties, and peculiarities, which are transmitted hereditarily from parent to offspring." *

---

* Longfellow's *Golden Legend*, p. 93.

† *The Prince*, ch. XXV.

It is an exploded theory that the bodies of infants are animated by "pure spirits" created by God expressly for the occasion; we know that they resemble their parents mentally and physically. After conception, or after the impregnation of one nature with another, the woman is conscious of a nature working contrary or different from her own; perhaps she is complaining, fretful, peevish, and does not control her temper, the consequence is, the child is fretful and peevish, having the mother's disposition. Immoderate indulgence of any passion, violent exercise, frequent intoxication, sedentary life, abstruse study, suppression of periodical evacuations, tumors compressing the brain, and constitutional irritability of the lungs, all have a tendency more or less to affect the child. Haller, in his preface to the "*De Genitura*" of Hippocrates, states it as maintaining the intermixture of the seed of both parents; that this seed is derived from every part of them, principally from the heart, through the spinal marrow to the kidneys by the intermedium of the testes, and thence to the pudenda, by channels distinct from those that convey the urine. The semen is from both, both male and female, and whichever predominates gives rise to a corresponding sex of the fœtus. The parts of the child are like father or mother, proportionately to the amount of semen derived from such parts in either. Defective children are explained from pressure experienced in the uterus.* We know that children inherit both the physiology and the mentality existing in parents at the time of copulation; we know that the different secretions of the body are affected by different diseases under which the body may be suffering. Also, the emotions of the mind have more or less effect upon the secretions: a joyous and genial state of mind has the effect to increase the secretions of the liver, while grief, anger, and the like, retard them; there cannot be a seminal emission even in sleep unless there is some mental emotion. A person may sit down to the table with a strong appetite, and just before eating he hears of the death of a relative or friend, such is the sympathy between the brain and the stomach that his appetite at once leaves him. Thus we see there is a perfect sympathetic relation existing between every organ and part of the body, and we can easily conceive the semen at the time of copulation by means of this sympathetic relation; the magnetic fluid is fully charged with the elements and functions of both the mind and body of parents.

---

* Quoted in Brodie's "*Mind and Matter*," p. 179.

The magnetic theory, which at one time attracted considerable attention, is, that the characteristics of parents are transmitted to children by means of magnetism, through the instrumentality of the secretions, and their intimate relation to both body and mind. The law that governs this matter is stated as follows. "Man has a twofold organization: the one, anatomical; the other, magnetic, or vital, which are intimately interwoven throughout; the latter, by means of its affinities and natural superiority, controlling the form, texture, etc., of the former, and securing its action through the instrumentality of various magnetic connections, depots, ect., called poles, which, put in action, produce and constitute all the phenomena of life. This magnetic constitution has two great central poles: the one in the head, the other in the chest. This magnetic nature of parentage is imparted to the germ of life, or embodied in it, only that it is yet folded up or concentrated in that great central pole in the chest where embryo life commences, and then deposited, by that function which imparts being, in the place provided for its nutrition, where also nature has stationed a full supply of maternal vitality, to feed it until it can germinate, as does the egg when subjected to incubation, or supplied by terrestial magnetism."

---

* Haller's *Hippocrates*, VI. II; p. 5. Lausanne, 1775.

BALTIMORE, MD.

[*To be continued.*]

PERISCOPE.

Influence of Sleep on the Appetite and Reparative Powers.

IF the sleep be broken, the appetite, with digestion and assimilation, is greatly impaired. Indeed, too much attention cannot be paid to this point, for from the loss of appetite patients rapidly waste, and the reparative powers of the system are greatly lessened, and thus the recovery is greatly retarded. Indeed, the loss of appetite resulting from want of sleep may completely wear out the patient, and be the chief influence causing death. It is thus of the utmost importance to secure to patients sufficient sound and refreshing sleep. This should always be accomplished, when possible, without the administration of medicines. The ventilation of the room should be carefully looked to, the diet must be carefully regulated, and regard must be paid to the amount of stimulants given. Often, sleep is prevented by these latter being administered too late in the evening; or, on the other hand, if patients be very weak, their absence may cause wakefulness, and patients previously restless not unfrequently fall into a refreshing sleep when stimulants are freely administered. All undue excitement before the usual time of sleep must be avoided. If pain prevents sleep, this must be allayed; and if the restlessness be caused by cough, this should be remedied. The cough of phthisical patients not unfrequently results from sore-throat. This is then red, injected, and it may be ulcerated. In such cases local applications to the throat are efficient remedies; one of the best is that recommended by Dr. Edward Smith. An eighth or tenth grain of morphia, dissolved in a drachm of syrup or glycerine, should be either painted on the throat with a soft camel's hair brush; or, which is better, swallowed slowly. This application frequently allays the cough, and allows sleep. If the cough proceed from irritation in the chest, this may often be allayed by counter irritation under either or both clavicles. For this purpose either a mustard poultice, or a blister, or a strong solution of iodine, may be applied. Inhalations, moreover, often succeed when given to allay cough; iodine or creosote inhalations are often of greater service than those of simple steam. The patient should be directed to rinse out a jug with boiling water to heat the vessel, and then to pour into it a pint or a pint and a half of boiling water; into this twenty drops of the tincture of iodine, or the same quantity of creosote, should be dropped. The vessel should then be covered over with a towel, and the patient must put the mouth and nose under the towel. This inhalation should be continued for five or ten minutes. If the cough be paroxysmal and violent, a mixture of laudanum with some chloric ether and tincture of lobelia inflata may often be given with advantage.

Sleep should always be obtained if possible without the use of large doses of opium, for this medicine itself lessens the appetite, and often greatly interferes with the other functions of the body. The practitioner has to decide whether greater harm will result from want of sleep or the administration of opium. Patients exhibit great individual peculiarities in respect to the action of opium, and thus the above question can only be decided by a trial of the action of this medicine. With many patients, this causes much excitement, sometimes of a pleasant, at other times of a disagreeable kind. With many, it destroys the appetite or constipates the bowels; in such cases, the opium may inflict even more harm than the want of sleep. On the other hand, some patients under its use fall into a refreshing sleep, and are in no other way affected by its administration. It should be the anxious endeavor of the physician to cure his patient with the smallest amount of medicine possible.—*Med. Times and Gazette.*

Comparative Frequency and Varieties of Hernia.

Dr. John L. Sullivan writes to the *Nashville Journal of Medicine and Surgery*, giving his statistics of hernia:

Number of men examined, 10,000. Number rejected on account of hernia, 455; or 45.5 per 1000.

Varieties:	
Femoral hernia, right,	1
" " double,	1
Umbilical,	6
Ventral,	9
Inguinal, right,	234
" left,	173
" double,	31
	455

Ether Spray in Strangulated Hernia.

Dr. John Barclay reports, in the *Brit. Med. Journal*, a case of strangulated hernia, in which reduction was accomplished after the use of ether spray. The pain induced by the most gentle handling of the hernial tumor was so intense, that Dr. B. had to desist from taxis. Having brought with him Richardson's ether spray apparatus, thinking it might be useful in lieu of ice, it was determined to invert the patient, apply the ether spray, short of freezing the skin, then to attempt the reduction, and, if failure was the result, to operate by the knife.

The head and shoulders then being supported on the floor by some pillows, and the buttocks raised as much as possible against an inclined plane, extemporized by an inverted bedroom chair, the ether spray was directed in the usual way on the swelling, for about forty seconds, when a minute spot of skin appeared white. The spray was at once removed, and on applying the fingers of the left hand on the swelling for about two seconds, accompanied by the most trifling pressure, plump up (or rather down) went the hernia, to the great delight and satisfaction of all. The man made a first-rate recovery.

Progressive Medicine.

Dr. John Hughes Bennett, in an address before the British Medical Association, at a recent session, made the following summary from the present stand-point of practical medicine:

"1. That the empirical method of treating disease has reached its utmost limits, and that little further improvement is to be anticipated from it.

"2. That the great advance which has taken place in the science of medicine has led, and is leading to various modifications in the rules of medical practice, which only lately were in general use.

"3. That these modifications principally consist in putting more confidence in the powers of nature, having recourse more frequently to the assistance of diet and other hygienic influences, and in employing more sparingly blood-letting and other so-called heroic remedies.

"4. That the value of many remedies in certain diseases is unquestionable, and that their judicious employment confers invaluable benefits upon mankind; but the utility of others is disputed or little known, and with regard to these a careful investigation is imperiously required.

"5. That such investigations demand great labor, advanced knowledge, and much valuable time, and that experience has demonstrated the impossibility of carrying them out satisfactorily without funds to remunerate investigators.

"6. That all applications of scientific treatment require the coöperation of medical men at large, and that no trustworthy results are likely to meet with general confidence in future, unless founded on extensive data, and formularized by a correct statistic."—*Edinburgh Med. Journ.*

Public Health.— The Death-rate in different Cities.

Dr. Farr, presiding over the late session of the British Science Association, instituted a comparison between the leading nations of Europe, in respect to public health. Russia's death-rate is the highest, if the lecturer's statistics may be trusted, being thirty-six per thousand, while the mean lifetime is but twenty-five years, the mortality being greatest in the southern part of the empire. It would be interesting to know the comparative consumption of brandy in Russia, which is a pretty large item in the undertaker's record.

Italy's death-rate is thirty, and the population of the country is as unhealthy as that of the towns. Rome is the healthiest city on the peninsula, because of her aqueducts. The Germans do not live thirty years on an average, and die at the rate of from twenty-nine to thirty in the thousand. Norway is the most desirable country to live in, since the mean of years is fifty, and the death-rate seventeen. Holland's death-rate is twenty-six. Belgium, France, and England's, twenty-two. In England, the mean age is twenty-six, the average length of life thirty-five. In sixty years, the increase of the Anglo-Saxon race, all over the globe, has equalled the present population of France.

◆

EDITORIAL.

A Word to Medical Students.

He who designs entering a profession, should aim to stand in its highest rank. If he considers such a hope absurd, he ought to give it up at once, and try something in which he can excel. To attain 6 position among the first class of any profession, requires untiring, unconquerable fidelity of application. Thus, in the medical profession the great majority are not industrious students—after they graduate, they rather decline in their scientific knowledge, except in practical matters, and even in those they generally make few improvements. Any young man of fair abilities may be sure of attaining a high and honorable position if he faithfully adheres to his profession and continues to increase in his knowledge by diligent study.

But all his diligence would produce a poor and barren result, if at the outset of his course he placed himself under the guardianship of those who say to the human mind, "thus far shalt thou go, but no further." In other words, if he studies with professional bigots, who tolerate nothing but what they teach themselves, and if he graduates in certain colleges, where he is required to give a solemn pledge to adhere throughout his life to the doctrines of his professors, and to surrender his diploma whenever he deviates from what he has been taught, he may as well surrender all idea of taking an elevated position in the *true healing art.* He may please his professors and gratify a certain clique, but he can never satisfy his own conscience that he has done the best for his patients in the sight of Heaven.

Colleges which exact such pledges have only one motive. They are conscious that their science and practice are behind the times, and that their pupils will not be restricted to their narrow circle of ideas, after they have been introduced to thoughts and principles of a nobler character.

In the Eclectic Medical College, no such pledges are exacted, for the simple reason that the Faculty, knowing that they are in possession of truth, believe that their truths do not need to be bolstered up by law or by pledges. They exact no pledges, for the same reason that the mathematician exacts no pledges to believe in his multiplication table, and the astronomer exacts no pledges to believe what he shows by his telescope. If the Faculty cannot show the superiority of their practice by clinical treatment, they do not ask belief in its excellence. If their physiological and therapeutic doctrines cannot be established by scientific experiments and by facts, they are willing they should pass away and make room for something better. They are content to teach their pupils the great and philosophic improvements in medical science, knowing that those who attend their lectures invariably participate in the hearty enthusiasm which is excited by the possession of such truths.

The finest and most liberal minds of the medical profession are and have been in different places struggling for the reforms advocated by the Eclectic Medical College. Many of the improvements in the Eclectic practice of medicine are slowly making their way into the prevalent system of practice.

Many young men are deterred from attending medical colleges by very erroneous views of their character and utility. How common is it for young men who design entering the medical profession, to spend two or three years in inefficient study, or reading, as it is called, in the office of a physician, and under false views of economy, attend only one course of lectures at a medical school prior to going into practice. Thus, with a very imperfect medical education, they proclaim the fact that they do not aspire to the common level of professional respectability. The community know that any faithful student of his profession can obtain the degree of M.D. if he deserves it, hence public opinion will recognize the man who fails to graduate in his profession with less favor. There are some fine physicians rich in practical knowledge of their profession, who have injured themselves by this mistake at the beginning. And yet the majority of those who occupy this rank, have really made as much sacrifice of time and money for their present position, as would have been sufficient to place them in a more desirable position. Every one who attempts to study medicine without studying it thoroughly in a good medical College, *loses both time and money by the operation*, as well as *respectable position.*

For proof of this assertion, we refer to the universal experience of students and professors; according to this experience, the four months of a college session teach a student and impress upon his mind more than he generally acquires in twelve months of private study—consequently it is cheaper to attend the most expensive schools in the United States, than to dawdle away time in private reading without collegiate advantages. The facilities now afforded by the Eclectic Medical College of New York are such that any young man in the country can complete his medical education.

The Electrolysis of Metals.

As this easily proved phenomenon has been, and is yet, doubted by many altogether, we will strive to give such concise directions as will enable any person, with ordinary intelligence, to satisfy himself.

of its truth. It is necessary that the voltaic battery required for this purpose, shall possess intensity sufficient to force the current through the system. As the latter is not a very good conductor, several cups will be required. Six of Chester's carbon battery cups may answer this purpose, but twelve would assure a greater certainty. These cups are charged, outside of the porous cups, with one part of sulphuric acid to ten or twelve parts of water. Inside of the porous cups the fluid must consist of the following:—To one quart of hot water, add 1½ pound of bichromate of potassa. After it is dissolved, add two pints of sulphuric acid and one gallon of cold water. This fluid is termed by Chester & Co.: "The Electropoion Fluid." This firm will sell it cheaper than small quantities can be made, and therefore it would be more politic to purchase it at once of them. After the glasses are filled with the proper quantity of acidified water, and the porous cups with the "Electropoion fluid," the cups may be connected together in an alternate series—that is, the carbon of one cup to the zinc of another, and so on until they are all thus connected. As the velocity of the battery has been a source of mystery to some persons, the following explanations may not be irrelevant. Take a series of two elements—that is, one zinc plate and one of copper. Here it is supposed the electricity derives its origin, or at least its dynamic force, from the decomposition of the water. The electric current is supposed to originate at the surface of the positive or zinc plate, and passing through the water to the copper plate, it ascends it, passing through the wire attached to it, to the wire (or pole) connected with the negative or copper plate. The current consequently *leaves* the wire attached to the copper plate, and hence this wire, or pole, is termed the *positive pole.* Of course the wire attached to the zinc plate is the *negative pole.* The positive pole is likewise designated by the term *Anode*, and the negative pole by that of *Cathode.* In connecting the battery cups, the carbon (if Chester's battery is used, and it is the best) is equivalent to the copper plate of the old battery, while the zinc cylinder is the positive plate, as is the case with the other batteries. To connect the cups consecutively, the carbon of one cup must be attached to the zinc of the next, and the carbon of the latter to the zinc of the next, and so on. Hence the wire attached to the carbon of the latter, or end cup, is the *positive pole*, and the wire connected with the other end, or the zinc end, is the *negative pole.*

These things being premised, the electrolysis of the patient is a very simple thing. Procure a common foot-bath, either of wood or porcelain (metal must not be used), and upon the bottom of it place a copper plate, well polished at its upper surface, and large enough to allow both feet to rest upon it. To this plate attach the *negative pole* of the battery, or trial pole, or wire, connected with the *zinc* end of the battery. The patient, after having taken off his stockings, is to rest his feet upon this copper plate. This foot-bath should contain water sufficient to cover his feet. To this water a little common salt should be added, to insure its conductibility. The positive pole should terminate with a small piece of sponge, moistened with a solution of salt. This sponge the operator holds in his hand; and in order that the current may not pass into his hand, a glass handle should be attached to it, so that no portion of the sponge shall touch his skin. This sponge may be applied to the back of the neck during the passage of the current. Or the patient may hold in his hand—occasionally changing it from one hand to the other—a metallic handle attached to the positive pole, for twenty minutes.

It frequently happens that the first *séance*, or sitting, will not disrupt the metallic combination sufficiently to convey it to the metallic plate upon which the feet rest. The second sitting will, however, accomplish it. If the person be well charged with the deleterious metal (say for instance mercury) small globules will make their appearance upon the polished plate. These may be by dexterous management accumulated into one large globule. If the metal exists in the system in very small quantity, a slight silvery appearance will only be discerned upon the plate. Arsenic and antimony will exhibit a bright metallic appearance, greatly resembling each other. If the plate is heated, and the metallic spot closely discerned, the one metal may be distinguished from the other. If it be antimony, the metal will fuse into little globules before it volatilizes, and then will gradually disappear. Arsenic, on the contrary, will volatilize at once, without fusing into globules, as it is the nature of this metal to volatilize before it reaches its fusing point. This simple experiment will at once distinguish antimony from arsenic, while mercury may be easily discriminated by its greater volatility, and by its making its appearance generally in little globules. If the above directions are followed, the reader will have no difficulty whatsoever in demonstrating to any skeptic the absolute certainty of electrolyzing obnoxious metals from the human system.

A Reform in Hospitals Necessary.

We have very often been impressed with the necessity of a little more humanity on the part of the controlling power, both medical and non-medical, of the various Hospitals of the country. As the Medical department of the general hospitals is almost entirely controlled and managed by young and inexperienced Physicians and Surgeons—those who have just completed their terms of academical medical study and without any medical experience they are appointed to these institutions. While all such positions are the very best and most desirable for the young medical man, these appointments are the most unfortunate that could befall the patients who are compelled by circumstances to resort to these institutions for medical assistance, as they are compelled to submit to whatever course of Medical treatment these young and inexperienced Physicians may direct. How is it possible for such to render the necessary assistance? The want of practical experience precludes any such result, and the sequel is the great mortality in part so great that but few intelligent statistics are presented to the public—we would not wish to be understood as trying to discourage young men from seeking such positions; far from this, for we would advise all to obtain them at every sacrifice, for it is a school from which an amount of experience can be obtained which is very desirable.

The most of the medical gentlemen who are connected with these institutions as the real attending Physicians and Surgeons, are connected with Medical Colleges and engaged in the general practice of their profession, which is alone as much as they can attend to. How is it possible that a Physician can visit one of these large Hospitals and examine and prescribe for one or two hundred patients in from three to four hours a day, and at the same time attend to his College and private practice. Any reflecting man will see at once that this is an impossibility, and all such pretensions are a fraud and imposition upon the sick and the public, who pay the necessary expenses for the support and comfort of the unfortunate human beings who find themselves thus situated. There is not a good practitioner of medicine in this city who does not find it necessary every day to give each patient he visits or that consults him, more than five minutes of his time; if this is so when the patient has every possible convenience of home and comfort, how much more is it necessary in Hospital practice, to devote at least as much time to each patient.

The reform that we suggest, is the appointment to all of such places, the Physicians and Surgeons who do meritoriously possess the very highest confidence, ability and skill; let them be disconnected from all the Medical Colleges; let them devote there the necessary amount of time and attention to every possible demand of the sick and the good of the institution. For this they should receive a salary in accordance with the amount of services rendered. If the requirements of the Hospital were such as to demand more attention than one could give, let there be enough appointed to render the necessary labor. In our opinion the saving alone in the burial department, including coffins, &c., would far more than pay the salaries proposed. If we are correct in our suggestions, it is very plain to see what a difference the mortuary statistics would show. Such could associate within them enough young men to carry out a healthy and successful administration of the duties of such institutions.

Another reform is in our opinion necessary. The law should make it the duty of some one to appoint a board of commissioners, whose duty it should be to visit all the institutions of this kind, with full power to act and to be possessed of the entire workings of the Hospitals. In our judgment, this kind of a commission should be appointed the present year, and required to act promptly. If such was done and the Coroners were required to hold an occasional inquest, the community would be startled and shocked in many instances at the dreadful fatality that attends the poor men and women thus situated, and thus would be the means of bringing to light many errors and wrongs which demand reform. The outside world never sees or knows what is going on in closed institutions. We have witnessed results in such institutions that would, if they had attended the same practice out-doors where it could have been seen, caused the greatest indignation, if not the severe penalties of the law. There should be an interest manifested upon this subject that will warrant a prompt action.

We propose in future numbers to take up some of these cases in detail, and if it is possible to inaugurate a reform in the management of these institutions, to do so.

National Eclectic Medical Association.

NEARLY all of the State Eclectic Medical Societies at their annual meetings during the year 1866 have strongly urged the propriety of holding a National Eclectic Medical Association. They have appointed Committees or directed their corresponding Secretaries to communicate with other Societies upon this subject. This is a very important move and one that requires a free interchange of sentiment, and a complete co-operation of the entire Eclectic Medical Profession of the United States.

We would suggest that the meeting be held in the Spring or Summer of 1868, at such time and place as may be agreed upon by a committee appointed by each of our State organizations of the present year.

The several conventions of the Association in 1849, '50, '51, '52, and '53 were very interesting, and contributed very materially to the rapid progress which the cause of Eclectic medicine made in those years throughout the country. We hope to receive the views of our Physicians on this subject as well as those of our Editorial co-laborers. We feel that so much depends upon this movement and that it might be productive of so much benefit to the cause of Eclecticism—that we cannot too strongly urge its adoption.

University of Michigan

Prof. Samuel G. Armor writes to us that "the class in the Medical department of this University the present session numbers over 500. Our students come from a great distance. I believe every State in the Union is represented; besides quite a number from Canada and other foreign countries.

"The steady and rapid growth of the University has been very wonderful, and especially when we reflect that it costs a student at least *twice* as much as any other school west of the mountains, St. Louis alone excepted. The Regents charge $30 for every student *out of the State;* this added to traveling expenses, and the two months' additional time, make the expenses of the student much greater than in any of the Western Schools, with the exception mentioned. Our term is *six months*, no student getting his ticket till the close of the term. We think we have made a move in the right direction by establishing a *six months' term*, and having but four lectures a day."

We copy the above letter from the Editorial Department of the Medical News and Library, Philadelphia, Dec. 1866.

The great advantage which the European Schools have offered to medical students for centuries past has grown out of the fact that those institutions were located in large and populous cities, and connected with the largest hospitals in the world; where instruction was afforded to students by clinical Lectures, by Surgical operations, and by the daily visiting of the wards of these Hospitals with the Professors connected with these schools. All of these facilities and opportunities for studying diseases were enjoyed by every Medical Student. So great were the advantages which this arrangement afforded to students, that these schools were attended by thousands of students from all parts of the civilized world. Hence it may be said that the facilities offered for obtaining a knowledge of clinical Medicine and Surgery, have been the greatest inducement for Medical Students to attend these schools. And this department has always exerted a wider influence than the didactic teaching itself.

As the cities of the United States have become more populous and the various hospital institutions in connection with medical colleges have become more numerous, the Medical Students of this country are permitted to enjoy as great, if not greater, facilities than in many of the European Schools of Medicine; and now, while we acknowledge our obligation to many of the great institutions of Europe, we are confident that it is no longer essentially necessary for students to leave this country to complete their medical education.

At this time it is admitted that the most important feature of medical instruction is, in this country, as it has been in Europe, the union of didactic with clinical teaching; and just as our institutions and cities can afford these facilities, so will be their influence upon the medical mind of this country and the advantages which medical students will derive from attending upon them. Every medical man is compelled of necessity to obtain a definite and fixed amount of knowledge from observation derived alone from the bed side, and which he cannot obtain in any other way. This being true, it is very plain and easy to comprehend why medical students who are educated under such circumstances, and why medical colleges located in populous cities where the students enjoy all of these facilities, are far better educated and the colleges are much more successful.

A medical student who is educated *alone* by didactic teaching, although he may have received his diploma as an evidence that his education has been completed according to the forms and requirements of his college,—should not be considered fully educated or prepared to practise medicine: and all such will and *do* find as soon as they assume the responsible duties of the profession that they labor under the disadvantages resulting from this want of a practical familiarity with disease, and they are compelled from day to day to begin a course of observation and study equal to the labor of a primary system of medical education to supply this deficiency.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

PRINCIPLES AND PRACTICE OF SURGERY, BY JAMES SYME, F. R. S. E., PROFESSOR OF CLINICAL SURGERY IN THE UNIVERSITY OF EDINBURGH, SURGEON TO THE QUEEN, &c.

Edited with notes and illustrations, by ROBERT S. NEWTON, M. D., Professor of Surgery in the Eclectic Medical College of New York City, &c.

Fifth *American*, from the last Edinburgh edition.

THIS is a work of peculiar interest to the Medical Profession, and especially to the Eclectic branch of it, and does great credit to its American editor. There is no living European Surgeon more justly distinguished than Mr. Syme. His improvements in the art of surgery, are so many and so important, that they entitle him to the lasting gratitude of all; while his candor and comparative freedom from prejudice, rank him among the most liberal among his profession in the old world. It is to the edition of the writings of such a man, that our American editor has devoted himself, bringing to his aid the well digested material of a ripe experience in the practice of his profession, according to the most improved principles of American Eclectic Surgery. Says he in the preface:—"The question is often asked, what have American Eclectics done to advance Medicine and Surgery? We have shown the true character of mercury, arsenic, and similar agents, as internal remedies, and produced compounds which do all that mercury is claimed to do, and even more, for they are free from the objections to which mercury is liable. We have demonstrated that inflammation is not a disease; that bleeding is never necessary, and that the practice is always unsafe. We have furnished a more rational system of practice, because we reject all theories which do not bear the tests of experience. In a word, we seek the positive and truthful no matter where found, and adopt as fact only that which we can demonstrate in practice. We have simplified operations and made diseases curable which have heretofore been considered as incurable." The editor unhesitatingly attacks any false theory propounded by the author as well as false or inefficient practice, explaining the doctrine held by the Eclectics, and shows by comparison the great improvements in the practice of those physicians.

The work is divided into twenty-seven chapters, and an appendix by the editor.

The first six chapters treat of inflammation and its resultants—mortification, effusion, ulceration, absorption, granulation, suppuration. On the subject of inflammation, on which the medical world have always been more or less divided, the editor takes the position that it is a "physiological condition set up in extraordinary cases, for the removal of pathological states, that have been induced by certain well-defined causes, which latter may be either external or internal," and that as the removal of the inflammation is not to be effected without first removing the cause. Inflammation is essentially a natural effort of the system to remove either a foreign substance, or to effect the repair of external injuries. The grand idea is that it is a natural action of a part modified by a changed condition, and that in the cure of the condition, we must work in harmony with the natural action. In the treatment of the resultants of inflammation, he recognizes those general principles. Chapter seven treats of "diseased nutrition," embracing terrors of all forms. Chapter eight is added by the editor, and is a valuable disquisition on cancer and its treatment, in the large and very successful practice he has had in the treatment of that formidable disease. He illustrates his treatment by the presentation of a number of severe cases, which were under his care, which were discharged cured, the disease not returning. Chapter nine is on blood vessels, including the treatment of the various forms of aneurism, and the manner of applying ligatures to the different arteries. Chapter ten, on external injuries, and Chapter eleven on amputation, are highly interesting and instructive. In the latter, especially, the author describes fully the operation at the ankle, called "Syme's operation" introduced by himself, by which he claims that there is less risk to the patient, at the same time he retains a limb more useful than a short stump could possibly be. In Chapter twelve, on excision of joints, he furnishes a strong argument in favor of that operation, which in our opinion, in all necessary cases, should be selected in preference to amputation, although it requires a more correct anatomical knowledge for its proper performance. In Chapter thirteen, on bones, and Chapter fourteen, on joints, the editor gives the Eclectic treatment of fractures, and especially of diseased joints, in which that practice is notoriously highly successful. Chapters fifteen and sixteen treat of muscles and tendons, including the various forms of talipes and strabismus. Chapter seventeen is devoted to diseases of the throat, while Chapter eighteen treats those of the chest, in which the editor gives his treatment for cancer of the breast. The succeeding chapter on the abdomen is mostly occupied by the treatment for hernia. Chapter twenty contains a description of the diseases of the pelvic viscera, such as stricture of the rectum and urethra, hæmorrhoids, fistula, &c. Mr. Syme's perineal incision, upon the point of a grooved sound in the urethra for stricture, is there described by the author, and in addition to this treatment for fistula and hæmorrhoid, the editor gives his own plan of treatment, by which in the former disease, all danger of hæmorrhage is averted, and in the latter the fistulous pipes are destroyed, the sphincter ani saved to the patient and a complete cure perfected. In Chapter twenty-one, on diseases of the genital organs, the Eclectic treatment of syphilitic diseases, without mercury, merits a careful attention; for the Allopaths claim that in those diseases especially, that drug is absolutely necessary. In the remaining chapters, on brain, spinal marrow and nerves, skin, eye and its appendages, mouth, nose, ear; there is much that it is peculiarly interesting, concerning the new treatment of many of the forms of disease therein described. Both author and editor have taken especial care to give to the profession the largest amount of valuable and interesting information, without an excessive amount of verbiage or circumlocution.

The work is elegantly and strongly bound in leather, printed with good type, on the best paper, and adorned with a frontispiece of the editor.

NEWS AND MISCELLANY.

WHY AMERICAN ECLECTIC PHYSICIANS REFUSE TO BLEED.

WE refuse to bleed, because we consider it unscientific, injurious to the constitution and often dangerous to life. A physician who takes charge of a patient, in the course of a critical attack of disease, is bound to do everything which will promote his recovery, and to abstain from everything which will increase his debility, or break down that vital power upon which his recovery depends. If other physicians, through ignorance and inexperience, urge a measure which he knows to have injurious and dangerous effects, it is his duty to protest against it, in order to protect the life of the patient, as he would protect the life of his own brother, in a similar position. A physician who is governed by these moral principles, will not yield to fashionable errors, and allow the life of a patient to be sacrificed, while it is possible for him to prevent it.

There are many fashions which have prevailed in medical science, arising from ignorance and inexperience, and perpetuated by authority and example, against which intelligent physicians have arisen, and by earnest opposition and remonstrance, have succeeded in procuring the necessary reform. The barbarous fashion of cauterizing wounds, and closing divided arteries by burning with a hot iron, was the universal fashion of the orthodox practice, until the bold reformer, Ambrose Pare, protested against it, and proved, by the trial, that arteries could be closed without burning, by means of a simple ligature. Pare, of course, experienced great opposition, but was soon triumphant; and every enlightened physician of the present day should be proud to follow his example, and co-operate in destroying or reforming the errors and barbarism of medical science.

We have not the slighest doubt that the entire medical profession will, ere long, regard the practice of bleeding sick and debilitated invalids, as not less absurd than the old fashion of applying the red-hot iron to a painful wound. A large portion of the medical profession have already condemned and rejected bleeding as a barbarism, and a still larger portion of the enlightened public agree with them in sentiment. The entire medical profession have been reforming their practice, in this respect, for fifty years past—bleeding less and less every year, as the world grows more enlightened, but changing their course of treatment so gradually that few are aware that an immense revolution has been accomplished. Twenty, thirty, or forty years ago, physicians almost invariably bled, in every case of active diseases, besides a large number of cases in which chronic debility and the deficiency of blood constituted the leading symptoms. Physicians generally have learned to treat a great portion of their cases of fever without any bleeding, and but few at the present day would be so stupid or barbarous as to resort to the lancet for an attack of cholera, dropsy, tuberculous consumption, delirium tremens, or simple insanity.

It is obvious that the general use of the lancet is going out of fashion in all civilized countries, and if this reform continues for the next fifty years to as great an extent as for the fifty years past, bleeding will be entirely out of fashion by the end of the present century; and the old fashioned lancet will be almost as great a curiosity to the public as the cauterizing irons from the days of Ambrose Pare.

When so great a reform as this is in steady progress, men of intelligence and practical sagacity ought not to wait for the slow progress of fashion, but to find out what is right, and to introduce it at once. The reform now in progress has been, to a considerable extent, brought about by the influence of those whose greater boldness and energy has enabled them to abandon at once an unscientific and dangerous practice.

The Eclectic Medical Physicians of America, are still teaching and practising the doctrine, that the blood is one of the most important parts of the human body, and one which should never be sacrificed under any circumstances. For if it would be barbarous to bleed a man in perfect health, and thus enfeeble and undermine his constitution, it is still more barbarous to bleed him when he has become debilitated by disease, and less able to endure so debilitating a measure. During the last forty years, this American non-depletory system of practice has been tested through all the climates of our country, from Canada to Texas and California, by thousands of practitioners, in every class of diseases. This vast accumulation of experience, has but strengthened and rendered immovable the conviction that the use of the lancet for bleeding, in the treatment of disease, is never, under any circumstances, requisite for the benefit of the patient. On the contrary it is very well known that in fevers, inflammations, and all other diseases for which the lancet has been prescribed the Eclectic practice has been vastly more successful than the practice of any class of physicians who resort to the lancet. Nay more; we can assert, without fear of contradiction, that all over the world, the class of physicians who have entirely repudiated the lancet, have been, without exception, much more successful than those by whom the lancet has been maintained. It is remarkable that all Physicians who have rejected or laid aside the lancet continue to be satisfied with their change, and are never tempted, under any circumstances to resort again to so destructive a measure. On the contrary, of those who have been accustomed to use the lancet, as taught by their professors, a large number are compelled by experience to diminish its use, and some even abandon it entirely, while others, dissatisfied with their results, become entire skeptics as to the value of medical science; or abandon their profession in disgust, unless they find relief in some new system. Even the most ignorant pretenders, without medical education, who merely know how to give a few vegetable remedies, and bathe their patients, have had sufficient success, in many places, to secure a preference over well-educated and scientific practioneers who follow the practice of bleeding.

This universal practical superiority of the non-depletory system, over the old and bloody doctrines of the profession, is a perfect demonstration of the necessity of reform; and whenever a physician of candid mind gives a fair trial to the two methods of practice, he invariably decides against bleeding; hence a large proportion, if not a majority, of those who now reject the lancet, are individuals who were educated to bleed, and would have continued to do so, but for the results of experience. A fair trial of the comparative efficacy of the two systems was made by a German physician, Dr. Dietl. It has long been supposed that pneumonia was, above all other diseases, the one which most especially required the use of the lancet, and which manifested the most remarkable benefit from its application. Dr. Dietl made a fair trial upon three hundred and eighty patients, of the relative value of bleeding and tartar emetic, in comparison with the unassisted resources of nature, with the following result: 189 were treated by diet and rest alone—their mortality was 14, or 7.4 per cent.; 106 were treated by large doses of tartar emetic—their mortality was 22, or 20.7 per cent.; 85 were treated by blood-letting, and their mortality was 17, or 20.4 per cent. Thus, while the natural mortality of the disease, without medicine, was one to 13½, the mortality under the lance was one to five, and under tartar emetic a little more than one to five, or nearly three times as great as when the disease was left to nature. Similar results were obtained by Prof. J. H. Bennett and Dr. Skoda. Wherever the blood-letting treatment has been subjected, by physicians or chemists, to a careful scientific investigation, the result has proved that it has no power to control inflammation, but, on the contrary by increasing the weakness and irritability of the constitution, it renders the inflammatory process more dangerous and destructive.

Majendie, the distinguished French physiologist, in making the experiment upon dogs, of placing a ligature upon the large biliary duct (ductus choledochus), found that the animals were invariably carried off by attacks of inflammation of the peritoneum (peritonitis). This inflammation was, of course, to be treated in the orthodox fashion by blood-letting; and following up this doctrine, he determined, by bleeding in advance, to prevent the development of inflammation entirely. But instead of preventing the peritonitis by this treatment, he found the attacks to be greatly aggravated. Reducing the blood to a more serous condition only made the peritonitis worse, and when, in place of the blood withdrawn, he injected water, the effects were only more injurious and fatal. Hence he honestly concluded that this mode of impoverishing the blood by the lancet was injurious. He says: "I do not hesitate to assert that the anti-inflammatory bleeding ordinarily practised before capital operations, may frequently, according to the constitution of the individual undergoing them, help to determine the serious accidents observed to follow these operations." "I myself long upheld contrary opinions to those I now maintain, but I willingly sacrifice my vanity, and acknowledge my error; if all were as ready to do so, the progress of our science would be much more rapid." Majendie declares, too, that he made a careful trial of the effects of tartar emetic in the treatment of pneumonia and rheumatism, and was entirely unable to discover that they produced any good effects at all upon those diseases, but on the contrary tartar emetic injected into the blood-vessels of animals actually produced pneumonia.

It appears, therefore, that the two fashionable remedies, which have heretofore been so much used in the treatment of inflammation of the lungs, really aggravate the mortality of the disease. If this be the case, it is no mystery that patients, who are left to the power of nature, with faithful nursing and bathing, recover so much better than those who are, after the old fashion, physicked and bled.

While the universal experience of physicians who have tried both systems, is emphatically opposed to bleeding—while the ample statistics from hospitals, infirmaries, and dispensaries, are equally decisive as to the superiority of a bloodless practice, the dictates of medical science are equally plain and positive, showing that the practice of bleeding is the most irrational violation of the laws of life and health. The facts upon this subject are so well established, so entirely incontestable, and so well known to all who are familiar with the modern achievements of medical science, that it is really remarkable that any well-educated physician should contend for the scientific propriety of blood-letting. The scientific facts by which this question must be determined, are of so simple and intelligible a character, that every intelligent citizen, when they are properly laid before him, may understand them as well as the greatest luminaries of medical science. Upon this subject, every man and woman of our country should be correctly informed, and prepared to protect themselves and their families against the formidable consequences of bleeding. The parent who allows a wife or child to die under this fashionable system of bloodshed, cannot easily excuse himself to his own conscience, for the weakness or ignorance which lead him to submit to so barbarous a practice.

Why should the blood of the human body ever be spilled or thrown away? Is it a superfluous or poisonous substance? Or is it an essential part of our bodies? Every one knows that the blood is an essential part of the human constitution; as essential as the heart or the lungs, the muscles, nerves, or brain. If a man in perfect health should voluntarily bleed himself, and throw away a gallon or two of his blood, he would be regarded as a maniac; and if he did not fall into some lingering form of disease, it would at least be long before he could recover his wonted vigor. The destruction of the blood would be as absurd and mischievous as the destruction of a portion of the flesh. When the flesh is extirpated by the knife, the injury is local; but when the blood is destroyed by the lancet, the injury is general, affecting all parts of the constitution, and enfeebling every vital power. About thirty-five pounds of blood are necessary for a man of ordinary dimensions, for the functions of life. Every ounce of blood which he loses from his proper supply, is a deduction from the general vital force of his constitution, and renders him more liable to become the victim of disease. Bleeding, therefore, is nothing more than a direct attack upon vitality.

The chemical examination of the blood, by the most distinguished pathologists of modern times, gives the most ample demonstration of this view of the subject. The blood consists of a clear albuminous and saline fluid, called serum, holding in suspension an immense number of invisible red globules, which red globules constitute one eighth of its entire mass. These red globules are the sources of the peculiar stimulating vitalizing power of the blood in all our organs. Take them away, the serous fluid which remains is incapable of sustaining human life; diminish their quantity, and in proportion to their diminution, the constitution becomes debilitated. It has been shown, by a vast number of examinations of the composition of human blood, that all persons of vigorous constitutions and vigorous health, have a large amount of globules, or a richer constitution of their blood, while those of feeble, nervous, scrofulous, lymphatic, languid, and sickly constitutions, have a more impoverished blood; or in other words, a blood deficient in its essential elements—the red globules. So uniformly is this the case, that it is laid down as a law, by the most distinguished chemists and pathologists of modern times, that when the red globules of the blood amount to one eighth, or twelve and a half per cent., the individual is in a fair condition for the enjoyment of health. When the quantity increases from one eighth to one seventh, or fourteen per cent., he is in a peculiarly plethoric and vigorous condition, in which condition his temperament is active, his muscles vigorous, his brain capable of great exertion, and all the functions of life capable of being carried on with a remarkable vigor. In this robust condition he is less liable to fatigue, less liable to nervous agitation, and dangerous diseases. On the contrary, when the proportion of globules in the blood sinks from an eighth to a ninth, or eleven per cent., the individual falls into a state of debility, and is much less able to undergo severe labor, or to resist any tendency to disease. When the blood becomes still more impoverished, greater and greater debility ensues, and under the ordinary circumstances of life, disease becomes inevitable. The supply of food being defective, each organ is imperfectly nourished, and whenever one organ is brought into very vigorous exercise, it withdraws from other organs what is necessary to maintain their activity. Thus, if the debilitated individual engages in a course of study, he debilitates his muscular system; if he engages in manual labor, his brain becomes inactive, he grows dull and stupid; if engaged in close and sedentary application, he becomes dyspeptic; and if his constitution is unable to sustain them—in short, for want of blood, the vital actions become feeble and unbalanced, the individual degenerates in his mental and physical powers, and if no other form of disease is fastened upon him, by local irritations, he gradually tends to a consumptive or scrofulous condition. Hence the immense mortality of consumption, which in most of our cities sweeps off one sixth of the entire population. Yet, no one ever died of tuberculous consumption, without going through this previous course of degeneration of his blood. The immense fields of medical practice are mainly supplied with their victims from the class of constitutions which have fallen below their normal standard of vitality, and lost their due supply of blood. Few, indeed, are attacked with disease who have maintained the normal composition of their blood, and whose vital powers are sustained by twelve, thirteen, or fourteen per cent., of the red globules. Such being the facts established by the researches of Andral and Gavarret, Majendie Simon, Becquerel, Rodier, Denis, Lecanu, and a host of other chemical pathologists, it becomes obvious that the great duty of physicians in the preservation of health is, to sustain the normal composition of the blood, and to prevent any impairment of the vital force which resists disease. Knowing, that if this normal composition of the blood could be kept up, consumption, scrofula, and a host of similar diseases of debility, would become impossible, it should evidently be the duty of the physician to increase, and not to diminish, those globulous elements of the blood, which are so essential to life, and which never produce any morbid effects.

The evils connected with the blood arise from degeneration and impurities, which nature is vigilant to remove. For this purpose she uses the lungs, the kidneys, the bowels, and the skin, to burn up and evaporate, or to wash away and remove all noxious elements which impair the health and vitality of the blood. These organs as arranged by the all-wise Creator, are perfectly competent to regulate the blood by removing its impurities, and by discharging any element which is in excess; and while these organs perform their duty properly, it is impossible that the blood should fail to be pure and healthful. If there is any departure from the standard of health, the rational physician, knowing its cause, stimulates some of the flagging organs to a more vigorous performance of their duty, and after he has properly aroused the action of the skin, the bowels, the kidneys, the liver, and the lungs, health is speedily restored. But he who follows antiquated fashions, rather than the lights of modern science, instead of purifying and renovating the blood, through the organs established for that purpose by the divine wisdom, inflicts a wound upon the veins and barbarously spills and destroys the blood, because he has not the skill or the patience to renovate its composition, in accordance with the laws of nature. Yet, what is to be gained by destroying the blood itself, when it has fallen into a morbid condition? After a portion of the blood has been drawn, the remainder is in the same morbid condition as before, while the vital power of the constitution is impaired, just in proportion to the amount which has been lost.

The globules which are the essential element of the blood, are the product of a mysterious vital power which operates slowly, and are very difficult to regenerate, while the more worthless, the impure and morbid constituents of the blood are rapidly reproduced. Water may be absorbed from the stomach and bowels, to fill the blood-vessels, in a few minutes—the albumen may be regenerated in a few days, while the inflammatory and morbid elements of the blood are capable of more rapid production than any other constituents. Thus, after bleeding, we find that the character of the blood is invariably deteriorated; it has less of the vital globules, is of a more serous or watery constitution, and in the majority of cases, has more of the inflammatory and noxious elements, with less vital power to resist their formation. Why, then, should a physician ever bleed? Why should he co-operate actually with the disease? Why should he render the patient pale, feeble, and bloodless, when the disease is already accomplishing the task with sufficient rapidity? Why should he attack and destroy the healthful life-giving portion of the blood, when it is only the inflammatory and noxious elements which he is required to expel? Why should he enter the citadel of life, and turn out its garrison the red globules of the blood, instead of expelling its enemies, the inflammatory, disorganized, and decaying substances, which nature is striving to expel? Why should he not assist the powers of nature in expelling noxious substances through the bowels, kidneys and skin, and leave the life-sustaining element in the blood, which enables the patient to resist the ravages of disease, and enables him, when the disease has subsided, to rise speedily from his bed, and resume the active duties of life?

Even supposing the patient should survive the double attack from his disease and from the lancet; supposing that he has retained blood enough in his veins to endure the painful and prostrating attack, he recovers with an exhausted constitution, and it is long before his cadaverous and trembling limbs assume the appearance of health. Long years afterward, he has occasion to refer back to that dreadful attack of fever which shattered his constitution, from the effects of which he has never recovered. But probably he is not aware, that the permanent injury to his constitution arose, mainly, from the loss of blood, and that had he been treated in a rational manner, he would have carried through his attack a sufficient amount of blood to have resumed, in a week or two, his wonted habits, with the vigor of limb and the elasticity of sprits which he had formerly enjoyed, and an equal prospect for a long and happy life, since no important portion of his constitution had been lost or greatly impaired.

If such be a fair statement of the ordinary effects of bleeding in medical practice among vigorons constitutions, what is it among the delicate and feeble? To all of feeble constitutions, the depletory system is a speedy and effectual mode of breaking down what little vitality they have, and inviting the early approach of death. It is not possible for those who have already less than the necessary amount of blood, to lose any material quantity of their vital resources without the production of disease. The pale, feeble, bloodless invalid—the delicate, nervous, and consumptive individual, who fancies himself to enjoy tolerable health, because ho is not yet confined to his bed—the dyspeptic, melancholic, languid individuals, whose relaxed muscles are incapable of performing one fourth of the task of a day-laborer, who never enjoyed the glorious consciousness of luxurious health and overflowing vital power, are capital material for the devastations of the lancet. As the raw conscripts of Napoleon were considered mere food for gunpowder, so this immense class of feeble constitutions has been, in times past, the food for the lancet. And medical men generally, until a few years past, have so commonly broken down that vitality in consumptive constitutions which they should have built up and renovated, that the idea has become almost immovably fixed in the medical mind, that consumption is an incurable disease. It was, indeed, incurable, when the physician, with lancet in hand, exhausted the vital power, and hastened the patient to his grave; but under the more rational system, which not only preserves, but builds up the vital power, not only is consumption curable, in a large proportion of cases, but a large number of diseases which end in death under the depleting system, end in the full restoration of health and vigor, under the treatment which preserves the blood — the circulating life of the body. — *Eclectic Medical Truths.*

NOTICE.

IT is desired that every Eclectic physician in the State of Indiana send me his address at once, and in return will receive documents from the State Eclectic Medical Association which will, it is hoped, prove useful.

Address— G. W. PICKERILL, M. D.,
Cor. Sec. E. M. A., Indianapolis, Ind.

CONN. REFORM MEDICAL ASSOCIATION.

THE semi-annual meeting of the Conn. Reform Medical Association was held at Meriden, Nov. 20th, 1866.

The President. J. W. Johnson, M. D., being in the chair called the meeting to order.

The minutes of last meeting were read and accepted.

Drs. H. I. Fisk, J. H. Robinson and G. N. Langden were appointed a Committee to confer with the Homœopathic Medical Society.

The report of the Committee on finances was accepted.

The report of the Committee on by-laws was read by Dr. Fisk

On motion it was voted that the preamble and by-laws be accepted and adopted by this Association.

Drs. J. W. Johnson, G. N. Langden and H. I. Fisk were appointed a Committee to confer with the next Legislature to change the name of this Association to that of the Eclectic Medical Society.

The Recording Secretary was instructed to collect the books and all papers belonging to the Botanic and Eclectic Medical Societies and present them to the next annual meeting.

On motion it was voted that the Committee on Equal Rights in State Hospitals be continued and confer with the Homœopathic Medical Society and report at the next annual meeting.

The following resolution was passed:

Resolved, That this Association is strongly in favor of, and highly recommends a National organization of the Eclectic Medical profession, and that annual national meetings in the future be held.

The Corresponding Secretary was directed to correspond with the Secretary of other Eclectic Medical Societies and inform them of the above resolution.

The following resolutions were recommended and unanimously adopted:

Resolved, That this Society recommend the Eclectic Medical College of New York as a school ably conducted and well adapted for the education of students and others for the profession of Medicine.

Resolved, That the American Eclectic Medical Review of New York be recommended to the profession as well conducted and worthy of a generous support.

Remarks were made by Prof. R. S. Newton, M. D., and Prof. Wm. W. Hadley, M. D., of New York, and other members present.

On motion it was voted that the Secretary report to the "American Eclectic Medical Review" at New York the proceedings of this Society.

The Society adjourned to meet at Hartford second Tuesday in May, 1867, at 10 o'clock A. M.

ROCKY HILL, Conn. N. D. HODGKINS, M. D., Rec. Sec.

AMERICAN

ECLECTIC MEDICAL REVIEW;

A Monthly Record of Medicine

AND

THE COLLATERAL SCIENCES.

VOL. II. FEBRUARY, 1867. No. 9.

ORIGINAL COMMUNICATIONS.

Old and New Chemistry.

A LECTURE DELIVERED BEFORE THE CLASS OF THE ECLECTIC MEDICAL COLLEGE OF NEW YORK.

J. MILTON SANDERS, M. D., LL. D.

> He who would come duly prepared and fitted to the business of interpretation, must neither be a follower of novelty, custom, nor antiquity; nor indulge himself in a liberty of contradicting; nor servilely follow authority. He must neither be hasty in affirming, nor loose and skeptical in doubting; but raise up particulars to the places assigned them by their degree of evidence and proof.
>
> LORD BACON, *Novum Organum Scientiarum*, No. xi.

> If any one should condescend to regard such things as are accounted rather curious than useful, and take a thorough view of the works of the alchemists, or the followers of natural magic, he might, perhaps, be at a difficulty which he should withhold, his tears or his laughter.
>
> ID., *Novum Organum*, sec. v.

IT is a little curious to think that for centuries men gazed upon the earth, observed the beauties of nature, breathed the air, swallowed the water, and never suspected, nor cared for, a knowledge of their nature. It really appears to me as if people in those ages had not the curiosity we have in this, else they certainly would have felt a strong desire to probe into the nature and composition of all these things. The ancients were people of strong intellectual powers. Their thoughts upon the mind, its objective and subjective powers, its analytical and discriminating force, and all of its various operations, were of the most philosophical nature. They had studied the human mind analytically: they were cognizant of all its phases of operation, and were complete masters of all its emotions, intricacies, and idiosyncrasies. To this subject they devoted their almost exclusive study. They labored under the impression that to study human nature in its various phases constituted the whole of philosophy, and that he who could write most voluminously upon this subject possessed the most wisdom. We have volumes upon the various operations of the mind in its relations to political economy, to philosophy—as they rendered the word—to religion, &c., still we say that these really intellectual people breathed the air, drank the water, ate their food, gazed upon and admired the various beauties of nature, and never conceived the thought of probing into the ultimate nature of these things. The conception that air, earth, fire, and water were the four and only elements, appeared to satisfy them. They accepted this postulate as the axiom of unimpeachable wisdom, nor for a moment appeared to doubt it. It never entered into the mind of any person to try by demonstrable evidence whether these elements were really so. So strong is the force of education and so binding upon us the *ipse dixit* of authority, that to shake it off requires a force of originality and independence of intellect possessed but by few. That "nature abhors a vacuum" was an axiom stamped by the highest authority, and to inquire *why* nature abhorred a vacuum would be to perpetrate a sin calling forth the severest censure and derision. Hence we perceive that mere sounding terms passed for causation and explanation, and what was really an evasion was accepted as a lucid interpretation. What was, therefore, termed philosophy in those days and for centuries subsequently, was a heterogeneous jumble of ideas, wrought into forms undemonstrable and incomprehensible, but which passed for a generalization of truths unimpeachable.

In time people began to tire of these abstrusities, especially as they brought forth nothing satisfactory or demonstrable. A new order of men came upon the stage, who, upon looking about them, saw at least the germ of the present science of chemistry. It is natural that people should at first form absurd notions, for it requires time to enable us to sift sophisms and errors from the bright truths which are incorporated with them. No one intellect can do this, nor even one generation; but in physical science, where long and tedious experiments must settle theories, topple over hypotheses and undo crudities, time is required in order that men's minds may become gradually capacitated to take in the light of new ideas. Error is a thing of quick growth, but slow to be eradicated, for the reason that it is more difficult to unlearn than to learn. Nothing adheres so tenaciously as a cherished opinion, or a theory rooted by early education. To get rid of these, really requires more force of will than to acquire many recondite ones of greater moment after the old rubbish shall have been brushed away. Before alluding to the truths of modern chemistry, we shall briefly take cognizance of the notions of those who were first awakened to the importance of this science. In the early ages the faculty of cupidity appeared to be the impelling force of human progress. It was thus with the science of chemistry. It is curious to read over the aspirations, the dreams and the pretensions of the earlier chemists. Not acquainted with the laws which govern matter, nor with its properties, but in a very limited degree, they were led away by a vivid imagination into the regions of the wildest absurdity. These earlier philosophers were termed *Alchemists.* This word is involved in some obscurity. It arose among the Arabians, who were the first alchemists. The origin of the term is under dispute, but the ablest philologists have decided that it was derived from *al-kemy*, the knowledge of the substance or composition of bodies, so named from the substantive *kymon*, signifying the substance or constitution of anything, from the root *kama*. This is the definition of Prof. Palmer, of Cambridge University, England. Prof. Brande says it is derived from *kema*, an oriental word signifying black (or, the black art), or from *Chemia* the Coptic name for Egypt, where the art first arose. Bryant (*Ancient Mythology*) says it is derived from *Chamia*, and that word from *Cham.*

Previous to the commencement of the seventeenth century, chemistry did not really exist as a science. Those who existed before this, it is true, were acquainted with a number of chemical substances, but they were merely isolated facts, empirically prepared, and not understood as regards their composition. In the fourteenth century Alchemy began to flourish. One prevailing idea originated it, or rather transplanted it from the Saracens : this was to transmute the ignoble metals, such as lead, into the noble metal gold. The Alchemistical writers of the fourteenth and two following centuries are voluminous upon this all-absorbing question. The earliest writer upon Alchemy that we have any account of, was HERMES TRISMEGISTUS, who lived in the year of the world 2076. His *Tractatus Aureus* is a record of the wonders of Alchemy, full of occult sentences, and mystical reasonings. This sage writer assures us that he should never have revealed the secrets of the Black Art, had not "the fear of eternal judgment, or the hazard of the eternal perdition of his soul," prevailed with him for such a concealment. But after this confession the reader may look in vain for a revelation of these wonderful secrets, for they are so hidden in the farrago known only to the initiated, that to get anything lucid from them is out of the question. This we may expect, for he assures us that his secrets cannot be revealed "to the profane, the unworthy, and the scoffer, who, being as greedy dogs, wolves and foxes, are not to feed at our divine repast." After this assurance, the reader is then conducted into the esoteric department of this mystical temple and there regaled with a repast upon the philosopher's stone, by which, he assures us, "through the permission of the Omnipotent, the greatest disease is cured, and sorrow, distress, evil, and every hurtful thing evaded, by help of which we pass from darkness to light, from a desert and wilderness to a habitation and home, and from straitness and necessities to a large and ample estate." Having thus excited our desires and cupidity, we are then directed how to "catch the flying bird" (by which is meant quicksilver), "and drown it, so that it may fly no more" (by which is meant the fixture of mercury by amalgamating it with gold.) We are then delectated with a very mystical account of "The well of the Philosopher," or *Aqua regia*, by which its soul will be dissipated, and its corporeal particles united to the "red eagle," or chloride of gold. Having failed to extract the secrets of Hermes from his very learned work, we will turn to another writer equally as voluminous, and equally as satisfactory to the anxious inquirer after the secrets of the black art—that is to GEBER. In perusing his four principal works, one is ever upon the *qui vive*, in the expectation that the wonderful secrets will be revealed, but we look in vain through his *De Alchemia*, his *De summa Perfectione Metallorum*, his *De Lapide Philosophiæ*, or his *De inveniendi Arte Auri et Argenti*, for the revelation of these secrets. GEBER wrote about the seventh century. His works are among the oldest treatises. They were published in Strasburgh in 1520, and, although replete with the mystical phrases of the Alchemists, have many passages which, as BOERHAAVE says, stamp him as a first-rate philosopher of his time. He wrote likewise upon diseases, and in his chapter "On the Alchemy of Sol," gives us various methods of refining gold, and how to dissolve it. His students are particularly directed to prepare their minds for the study by suitable acts of piety and charity, which, by being persistently carried on, may enable them "to change argent vive into an infinite solific and lunific, without the help of anything more than its multiplications." He is the inventor of various alembics, crucibles and furnaces, some of which are used, with some modifications, at the present day. "Bring me the six lepers that I may cleanse them," he says; by which he means that if the six metals, mercury, iron, copper, tin, lead and silver, are given him he will transmute them into gold. The reader may readily conceive that his sentences are not very clear, from the fact that our word *Gibberish* is derived from the style of GEBER and his pupils.

We next come to the Alchemist ARTEPHIUS, who in 1170 published several works. We are assured by Roger Bacon that this eminent alchemist lived to the venerable age of 1,025 years, having attained this remarkable longevity through the rejuvenating effects of *The Grand Catholicon.* His works, and those of his pupil JOHN DE RUPESCISSA, have passed almost into oblivion, while the brighter star in alchemy, ROGER BACON, still survives. FRIAR BACON flourished in 1240 as a learned man. Prof. Brande says of this alchemist: "I know of no work that strikes me with more surprise than the *Opus Majus* of Roger Bacon: he stands alone like a beacon upon a waste; he is perspicuous and comprehensive, and full of anticipation of the advantages likely to be derived from the mode of investigation insisted upon by his great successor Chancellor BACON.

FRIAR BACON was soon accused of witchcraft, and was thrown into prison and nearly starved to death for exposing the prevailing immorality of the clergy, and came very nigh being burned as a magician.

HALLAM, in his *History of the Middle Ages*, thus writes of the two BACONS: "Whether Lord Bacon ever read the *Opus Majus*, I know not; but it is singular that his favorite quaint expression *prerogativa scientiarum* should be found in that work; and whoever reads the sixth part of the *Opus Majus* upon experimental science, must be struck by it as the prototype, in spirit, of the *Novum Organum.* The same sanguine, and, sometimes, rash confidence in the effects of physical discoveries; the same fondness for experiments; the same preference of induction to abstract reasoning, pervade both works." FRIAR BACON was the alleged inventor of gunpowder, and this immortalizes his name. His work, "*The Mirror of Alchemy*," possesses but little merit, so *Prof. Brande* informs us. That he was the inventor of gunpowder is, however, erroneous; for we have the account that this substance was introduced by the Saracens into Europe direct from the Arabians, and was known to the Chinese centuries previously.

ALBERT OF COLOGNE was a contemporary of Roger Bacon. He invented the *Brazen Head*, which was destroyed by his pupil, Dr. AQUINAS, in a paroxysm of pious zeal, suspecting it to be an agent of Satan. Dr. AQUINAS wrote several works upon alchemy; but they are obscure and unintelligible.

Albertus Magnus was deeply skilled in alchemy, and his works are voluminous, occupying twenty-one folio volumes. In one of his works occurs, for the first time, the word *Amalgam*, which is still used to designate the alloying of mercury with another metal.

Without alluding to the works of the alchemists any further, we will examine some of their assertions. You will be enabled to judge of their pretensions from their own language. We are assured that the wonderful *Powder of Projection* would convert the baser metals into gold. We are informed that one *Paykul*, by adding one part of this wonderful powder to six drachms of lead, produced an ingot of gold, which was coined into one hundred and forty-seven ducats. How this powder could increase the weight of six drachms of lead—a lighter metal than gold—into gold sufficient to make so many ducats, we are not informed. But this is even excelled by the stories of the great alchemist Helvetius, in his "*Brief of the Golden Calf.*" This book recounts the greatest secrets, "discussing the rarest miracles in nature; how by the smallest portion of the Philosopher's Stone, a great piece of common lead is totally transmuted into the purest transplendent gold." This, we are assured, was accomplished at the Hague, in 1666. This learned Dr. Helvetius assures us, that he had seen a piece of the Philosopher's Stone, not bigger than a walnut, which possessed the miraculous property of transmuting twenty tons of lead into gold; and he further assures us, that with a small piece, less than the size of a coriander seed, he had himself transmuted half an ounce of lead. Now, perhaps you may have the desire to transmute some lead into gold yourselves. I apprehend you will have no difficulty, so very lucid are the descriptions of the processes given by these Masters of the Black Art. You may peruse Stahl's *Fundamenta Chemiæ*, and Junker's *Conspectus Chemiæ*, upon these processes; or, better still, the learned alchemical work of Carolus Musitanus. The latter lets us into the secret in the following very lucid manner:

1. Prepare a quantity of spirit of wine, so free from water that it is wholly combustible, and so volatile, that when a drop of it is let fall, it evaporates before it reaches the ground. This constitutes the first menstruum.

2. The next is pure mercury, revived from cinnabar with salt and vinegar.

3. This mercury is triturated till all the running mercury has disappeared.

4. The mixture is sublimed in an *aludel.* This is sublimated the second time. This sublimate is "the salt of wise men," and, we are assured, possesses wonderful properties.

5. It is ground in a mortar, and the spirit of wine poured upon it, and exposed to a mild heat for 24 hours. The spirit of wine is then distilled off, together with the "spirits of the mercury." These are re-distilled, when the philosopher says, "You have now performed a great work—now return thanks to God, who has hitherto crowned your great work with success. Now is this work," the alchemist further states, "no longer involved in Cimmerian darkness, but clearer than the sun, though preceding writers have imposed upon us with parables, hieroglyphics, fables and enigmas." The alchemist then proceeds with his explanation of the great secret of transmutation. He informs us that "this mercurial spirit contains the magical steel in its belly." After another distillation, he says, we will find at the bottom of the retort the "quintessence, or soul of the mercury." He now assures us that he shall at once proceed to give us the secret, which he "shall communicate clearly and distinctly, without digression or obscurity." He then proceeds: "In the name of God, then, take common gold, purified in the usual way by antimony; convert it into small grains, which must be washed with salt and vinegar, till it is quite pure. Take one part of this gold, and pour upon it three parts of the quintessence of mercury; as philosophers reckon from seven to ten, so we also reckon our number as philosophical, and we begin with three and one; let them be married together, like husband and wife, to produce children together of their own kind,

and you will see the common gold sink and plainly dissolve. Now, then, marriage is consummated; now two things are converted into one; thus the philosophical sulphur is at hand; as the philosophers say, the sulphur being dissolved, the stone is at hand. Take then in the name of God our philosophical vessel, in which the king and queen embrace each other as in a bed-chamber, and leave it till the water is converted into earth; then peace is concluded between the water and the fire; then the elements have no longer anything contrary to each other; because when the elements are converted into earth, they no longer oppose each other, for in earth all elements are at rest. For the philosopher says, 'when you shall have seen the water coagulate itself, think that your knowledge is true, and that your operations are truly philosophical.' The gold is now no longer common, but ours is philosophical, on account of our process; at first exceedingly fixed, then exceedingly volatile, and finally exceedingly fixed; and the whole success depends upon the change of the elements. Now our tincture is wholly converted into sulphur, which possesses the energy of curing all diseases; this is our universal medicine against all the most deplorable diseases of the human body; therefore return thanks to Almighty God for all the good things which he has bestowed upon us." The philosopher then gives us the process for "fermenting gold" by projecting it upon sulphur. The sulphide he terms fermented gold. This fermented gold he then "projects" upon mercury, and this is his "perfect metal." Our philosopher concludes his description thus: "My friend, you have a description of the universal medicine, not only for curing all diseases and prolonging life, but also for transmuting all metals into gold. Give thanks therefore to Almighty God, who, taking pity on human calamities, has at last revealed this inestimable treasure, and made it known for the common benefit of all."

After perusing this rigmarole, you will perceive that these alchemists had conceived the notion that, not only would gold prolong human life, but that it would confer its stable and unoxidizing properties to metals.

I have given you the above quotation in order that you may have a fair sample of the want of lucidity which characterized the writings of the alchemists. They wrote, not to instruct or enlighten, but to conceal their own ignorance, under the garb of pretentious erudition.

Passing over these first alchemists, who were mere pretenders, we find an advance in Basil Valentine, who flourished in the early part of the fourteenth century. Although he was strongly tinctured with the notions of the alchemists, still he possessed an acute, philosophical intellect, and was the discoverer of several important substances. In his "*Triumphal Chariot of Antimony*" he gives us a variety of experiments and suggestions which prove that he possessed a mind of no ordinary nature. In his *Heliographia* he treats of the preparation, uses and virtues of mineral, animal, and vegetable salts. In his *Currus Triumphalis* we find directions for preparing nitric, sulphuric, and muriatic acids, being the first treatise in which their preparation is mentioned. He likewise gives the process for the preparation of sulphate of iron, in which he assures us that this salt is a good medicine as a tonic, and applied as a styptic. The term antimony, so we are informed, was derived from the following incident: Having thrown some antimony to some hogs they ate it with avidity and fattened upon it. This singular circumstance being communicated to the head of a monkish establishment, that functionary conceived the idea of trying it upon some of the monks, who had become lean through fasting, prayer and mortification. The kind anticipations of the good father were scarcely realized, for the monks "quickly went to heaven." Hence the metal was named *Antimoine* (or antimonk), and became corrupted to *Antimony*.

I have given you, gentlemen, a brief sketch of the rise of the great science of chemistry. It took its origin, as you perceive, amongst men whose motives for cultivating the science were guided more by the promptings of avarice and cupidity, than for the noble purpose of acquiring a knowledge of nature. In speaking of these alchemists *Bergman* says:— "Although most of them are deceptive and very uncertain, some bear such character and testimony, that unless we reject all historical evidence, we must allow them to confidence." We, however, agree perfectly with *Prof. Brande*, who says: "For my own part, the perusal of the histories of transmutation appears to me to furnish solid ground for a diametrically opposite opinion. They are all of a most suspicious character; sometimes the fraud was open and intentional, succeeded by juggling dexterity; at other times the performers deceived themselves; they purchased what was termed a '*Powder of Projection*,' prepared by the adepts, containing a portion of gold; and when they threw it in the fire with mercury, and found that portion of gold remaining in their crucible, they mistook its source. But the cases which are quoted as least exceptionable are often exactly those which are really impossible: namely, where the weight of the powder of projection, and of the lead, or other base metals, taken conjointly, was exceeded by that of the gold produced."

Since those early days, the science of chemistry has steadily advanced. For a time it struggled against error and prejudice. The phrase of "The Black Art" clung to it, and its votaries were thought to be in league with the devil. The Church (that formidable adversary to progress in the middle ages) stamped the seal of its condemnation upon it. He who studied this science was proscribed, and hence its cultivators were necessitated to conceal themselves in dark places, lest the officers of the Holy Inquisition should get wind of their proceedings. Finally it emerged from its darkness, and proscription ceased to follow it. The men of education and intellect directed their attention to it, and it gradually arose and began to assume the dignity of a science. Still it was replete with errors, which clung to it with remarkable tenacity. It required many years before men's minds could be freed from that stupid absurdity *Phlogiston*. This idea retarded the progress of the science for half a century, for until this notion could be got rid of it was impossible for the present truths of the science to have their birth. It was the general idea that all bodies, at least those which we term combustible, contained a fluid termed phlogiston. Upon being burnt, this phlogiston was supposed to escape. This idea can readily be conceived, if we will observe the combustion of a piece of wood. We can easily imagine the escape of a fluid giving light and heat, as we observe the little fingers of flame shooting out from the wood. This was thought to be the phlogiston, or principle of combustion, escaping from the wood. This idea precluded all further research upon the subject—the phrase phlogiston accounted for it all, and at once stopped all further thoughts—and the beautiful and instructive process of combustion was a sealed book.

Thus the theory of BEECHER and STAHL took precedence, and its great plausibility prevented all others from gaining the favor of the public. "Water, acid, earth and fire," said these philosophers, "in phlogiston is a principle of extreme tenuity, and prone to a kind of vertiginous motion in which it appears as fire."* When phosphorus has burnt, says Stahl, it produces an acid matter, with evolution of much heat and light; consequently phosphorus consists of acid and phlogiston; or where zinc is heated to redness, it burns with a brilliant flame, and is converted into a white, earthy substance or *calx.* Hence zinc consists of this earth and phlogiston. It will be perceived that nothing is said about the increase in weight of the zinc by being burnt. REY attributed this increase (for it had been observed) to the condensation of air; and MAYO has referred it to "nitro-aerial particles." (HOOKE had noticed previous to this, that nitre had given out an air, which he termed nitro-aerial particles.) This, it would be unnecessary to say, was oxygen, but it was not suspected that air, as it was termed, entered into combination with the zinc, thus increasing its weight. It was left for a greater and more acute intellect to unravel this intricate problem, and that man was LAVOISIER. From his time chemistry assumed a new phase, and for the first time took the form of a true science. The wild speculations of the older chemists were supplanted by true inductive research, and we read no more those interminable essays, filled with incomprehensible subtleties upon atoms and imaginary principles which existed only in the brains of enthusiasts. We have no mere assertions, that a pungent taste is owing to the atoms of the body being formed of sharp particles. In a voluminous tract devoted to these subjects, LEMERY assures us that the particles of an acid bear the form of spear-heads with barbs; and that those of the alkalies are formed like a sponge; and the neutralization of the alkali by the acid was perfectly explained by the fact of the blunting of the acid particles by the alkaline ones. For instance when gold was precipitated from its solution by ammonia, he attributed to the ammonia the property of breaking off the spear-heads from the shafts of the acid particles. "It acts," says Lemery, "like a cudgel which a boy throws up into a walnut tree loaded with fruit." In the same manner things were judged more from their physical than chemical properties; for instance, a cooling action upon the system was ascribed to certain substances possessed of a cooling taste: and alcohol, in consequence of its *strong* taste, was termed a *Roborant*, or strengthening remedy.

---

* Beecher, in his *Physica Subterranea*, informs us that "the elements of all bodies are air, water, and three earths, one of which is inflammable, another mercurial, and another fusible." "The three earths combined in the water," he adds "constitute an universal acid, which is the basis of all other acids. The combination of the two earths produces lapideous bodies; and in the metals the three earths are united in various proportions."

These notions have passed away. A different class of men have appeared upon the stage. The progress of a century or two has brought forth a class of philosophers with intellects of a different stamp. Devoid of that cupidity which impelled the old philosophers, and desirous of disseminating the results of their labor, instead of concealing them, they have stamped a new era upon the mind's progress. The adoption of the *Balance* has wrought wonders by giving to experiment a numerical value it did not before possess. By this we derived our knowledge of definite proportions, and of chemical equivalents, and we began to comprehend the beautiful order which reigns in all substances. Instead of chaos and disorder, we find harmony and exactness existing in all matter; that the dirt at our feet, the stones lying around us, the air we breathe, the water we drink, and all vegetable and animal substances are subject to the same laws, whose exactitude binds them into groups of molecules as perfect and harmonious as immutable truth. Not only insentient matter, but all the sensuous and percipient powers—the various intricacies of the intellect, the passions, the emotions, are all subject to the same laws—the mere creatures of affinities. A burst of passion may be weighed in the balance, for we find that the duration and intensity of the paroxysm, may be estimable in grains. A paroxysm of grief may possess the value of ten or twenty grains of metamorphosed cerebral matter, and another of joy perhaps as much. The least exertion in thinking may be safely estimated in the proportional increase of phosphates in the urine, and then we arrive at a numerical expression of the amount of force expended in a certain amount of thought. We find that this force is derived from the food, and that it was originally obtained by the vegetation that wove it into organic matter for us, from the sun. All mental exertions, we have therefore ascertained, are creatures of the sun. In the sun they derived their birth, and doubtless, to the sun they will ultimately return. The sun, we find, is the great reservoir of force in all its forms of Heat, Light, Electricity, Magnetism, and chemical Affinity. These are all forces, and may be estimated correctly in foot-pounds, whereby we may arrive very closely at the number of feet a certain amount of thought will raise a weight of one pound. Thus the chemist of the present day does not busy himself about the transmutations of lead into gold, but his aims are higher, nobler, and more worthy of the Divinity which reigns within us. Not content with the materials which surround us upon this sphere, the philosopher has penetrated into distant planets—into our sun, and the fixed stars. He finds by *Spectral Analysis*—by the rays of light from these far-off orbs—that they are globes like our own, containing the same substances, or at least a part of them. We call down the rays of light from their surfaces, and compel them to reveal to us, in undeviating and unmistakable language, the various materials of which they are built up. For thousands of years these rays of light may have been traversing the vast void that intervenes between those planets and us: but finally they reach us; bearing in their bosom the language of their composition, they reveal to us the curious information, that they too contain iron and copper, and soda, and potash, and various other familiar substances so bountifully supplied to our own planet.

No less wonderful are the achievements of the modern chemist among the matter lying immediately about us. The people for ages past have not failed to recognize, in most fruits, a delicious flavor peculiar to each one. What can be more refreshing and delectable, than the fragrance emanating from the strawberry, or pine-apple, or raspberry, or banana, or melon, or peach, or plum? It was never supposed that these very rare and fugitive flavors could ever be the creatures of successful analysis, or, much less, that after prying into their composition, they would ever be produced, in all their deliciousness, by the art of the chemist. And still how much more difficult the belief, that when these mysterious processes were discovered, we should ascertain that these delightful flavors emanate from the bosom of putridity, nauseousness and poison. Can there be anything more disgusting and forbidding than the refuse of the gas-retort—coal tar? Spurn it not—turn not from it with the expression of disgust—for it contains locked in its fœtid bosom the most vivid colors in nature.—Ay, it contains things of greater value; for locked within those dull crypts are secreted bases whose combination with acids will produce alkaloids resembling those produced by nature—alkaloids which, like the natural ones, are destined to remove from the emaciated frame its disease—to impart to the lips, ashy with disease—to the cheeks paled with disordered action, the bloom of health and of youth.

Look around you! There is nothing that the chemist has not placed his wand upon, and impressed upon it forever the stamp of his genius. From the nauseous plant he has evoked the most valuable medicines, or the most vivid dyes, or those neutral substances of infinite value to the arts. To the very air itself, he has imparted renewed life, and given it a chemical vigor which it does not possess in its common oxygen, by means of its *ozonized* condition. He has found that this *ozone*—everywhere about us, and only a brief time ago unsuspected—is the really vivifying principle of life, and the accelerator of the decomposition of all animal and vegetable matter, that life may again spring out of death. To this active, or allotropic oxygen, we owe everything. Bereft of its presence all life would cease upon the earth—death would exist everywhere, and chaos itself would take the place of the beautiful order and harmony which characterize the wise ordinances of Providence. Tremble not, therefore, when the deafening peal of thunder rolls overhead, for the vivid and fierce bolt of electricity which sweeps over the heavens carries along with it, and imparts for hundreds of yards around it, a vivifying influence which involves all sentient beings. We little dream that in the vivid glare of the leaping lightning, there is life and hope, for in its wondrous force there is involved a corresponding vital one, implicating all living things.

Marvel not, then, that we are surrounded with things wonderful, whose invisible spells are constructing a potent chain of destiny ever about us. The tiny children of light are hovering around us, and with fairy fingers are impressing upon us the singular potency of their spells. The gorgeous robe they fling upon us bears in its folds the very essence of vitality. Attenuated and delicate as is this robe of light, it contains within its folds all the forces that we see upon this earth; and of such a Protean property, that we are the more astonished at its versatile and polygenous nature. The irresistible fury of the tornado, the force of the surging waves, the terrific might of the leaping lightning, are due to the silent though potent force of this sun-light—

and still, with fairy fingers, more delicate than the touch of the gossamer, it paints upon the sensitive film the wonderful photographic picture. It throws upon the peach its blush, and steals from organic matter, at the same time, its color. It causes substances to form stable combinations, and produces forcible decomposition in others. It "paints the lily, and adds perfume to the violet"—it forms poison in one plant and nutrition in another, thus, by the effects of the same force, supplying the materials of death and of life.

Oh, wonderful indeed are those imponderable rays of light! Issuing from the sun in floods, they impinge upon us with the incomprehensible force derived from a velocity of 200,000 miles a second, and still our delicately sensitive nerves do not feel their contact! Winged messengers are they, bearing from that great source of life and motion that supply which is required to keep up an ever renewed creation here. A cessation of these celestial visitors for a very brief time, would bring upon our earth death and chaos, and at once destroy that beautiful order and harmony which prevails in every atom of this beautiful sphere.

To attempt to follow the modern chemist throughout the entire range of his discoveries, would involve so much space, that we recoil from the task. His has been a glorious work. Unlike the alchemist, he has felt only the impelling principle of lofty and disinterested ambition; that aspiration which strives to delve at the laws of nature, not for self-aggrandizement, but for the good of future generations. And future generations will bless him. Long after his spirit has left this earthly scene of his labor, posterity will recognize the bright truths he has invoked from matter, and call blessings down upon his memory.

Hereditary Influence.

BY CHARLES S. DAVIS.

[*Continued.*]

It has been noticed that children commonly share more largely of the mental faculties of the mother than of the father, although instances have occurred where both father and mother have manifested no extraordinary mental powers, in whose offspring the mighty mind of some sleeping ancestor has roused anew, and exhibited, in a distant posterity, genius and wisdom, by a kind of intellectual resurrection. Says Dr. Gregory: "Children resemble not only one but both parents, thus proving that the rudiments (*primordia*) are derived equally from each parent, so that of the children who have a mixed resemblance, some may incline to the father, others more to the mother."* An anonymous writer in the *N. Y. Eclectic Med. and Sur. Journal*, for April, 1851, puts forth the idea that, in the generation of men, the soul is from the father, and the body from the mother; that the soul is in the seed of the father, and is clothed with a body from the mother; or, which amounts to the same, the spiritual which a man has, is from the father, and all the material from the mother; and he gives this illustration: "If we take an ordinary hen's egg that is good, and set it, there will in due time come forth the chick; but if we take the hens away from the rooster, although the hens will lay eggs the same, they will not hatch, because their vital principle furnished by the rooster is not there."

Galen thought that the embryo was formed by the substance of the male semen; and that the humor supplied by the female, served the mere purpose of nourishing. This recalls to mind the word of the poet:

"The vitalizing spark is from the sire,
The mother feeds and blows the living fire!"

Prometheus is said in Pagan story to have formed the human frame, and Minerva to have inspired it. Gen. Daumas, writing of "*Les Chevaux de Sahara*," says, "The experience of centuries has established that the essential parts of the organization, such as the bones, the tendons, the nerves, and the veins, are always derived from the stallion. The mare may give the color and some resemblance to her structure, but the principal qualities are due to the stallion."

---

* *Conspectus Med. Theor.* Cap. xxi; § 782.

In the transmission of deformities, such as extra toes, extra fingers, etc., sometimes the male, and sometimes the female, is shown to preponderate by the offspring inheriting the deformity of the male or the female. It is well said by Giron, that if the organization of the male was the only one which passed to the child, the child would resemble the father, as the fruit of a graft resembles the tree from which the graft was taken, and not at all the tree on which it was grafted.*

If the father bestows the nervous system, how are we to explain the notorious inferiority of the children of great men? The question may be asked, how a man of genius is ever produced, if the child is always the repetition of his parents? How can two parents of ordinary capacity produce a child of extraordinary powers? Says a writer: "*both* parents are *always* represented in the offspring: and although the male influence is seen to preponderate in one direction, and the female influence in another, yet this direction is by no means constant, is often reversed, and admits of no absolute reduction to a known formula. We cannot say absolutely, 'the male gives such organs;' we cannot even say, 'the male always preponderates in such or such a direction.' Both give all organs; sometimes one preponderates, sometimes the other. In one family we see children resembling the father, children resembling the mother, and children resembling both." †

The idea of Brouzet was, that the fact of all our organs being double, is owing to the concourse of both parents; so that the father will give one half, the mother the other half, the father the right, the mother the left side. ‡

Lavater, in his "Physiognomy," makes the following curious remarks: "I have had occasion to observe some infants immediately after their birth, and have found an astonishing resemblance between their profile and that of their father. A few days after, the resemblance almost entirely disappeared; the natural influence of the air and food, and probably the change of posture, has so altered the design of the face that you would have believed it a different individual. I afterwards saw two of these children die, the one at six weeks, and the other at four years of age—and about twelve hours after their death they completely recovered that profile which had struck me so much at their birth; only the profile of the dead child was, as might be expected, more strongly marked and more tense than that of the living. The third day their resemblance began to disappear. I once knew a man of fifty, another of seventy, both of whom, when alive, appeared to have no manner of resemblance to their children, and whose physiognomies belonged, if I may so express myself, to a totally different class. Two days after his death, the profile of one became perfectly conformed to that of his eldest son, and the image of the other father might be traced to the third of his sons. The likeness was quite as distinctly marked as that of the children who, immediately after their death, brought to my recollection the physiognomies which they had at their birth."

---

* *De la Génération.* P. 113.

† *Westminster Review*, July, 1856. P. 84.

‡ "Cette idée ferait présumer que notre corps est double, et que nous sommes composés de deux corps finis artistement adosés l'un à l'autre." *Essais sur l'Education Medicinale des Enfans.* Paris, 1754.

A close similarity exists between the form of the body, or the looks of a person, and the tone and characteristics of the mind. O. S. Fowler writing upon this subject says: "The form and looks of the body depend upon, and are goverend by, its structure; and this same structure is also as the organization of the brain and nervous system; and they are as the qualities of the mind. As is the form, so is the structure; and as is the structure, so are the mental qualities. And there are certain shapes of body, which invariably accompany certain traits of character, talents, and peculiarities. I believe, for example, that the original, inherent properties of the mind, assume particular shapes of body—those shapes best adapted to its manifestation; that, as a pepper seed and a kernel of corn, both planted together, having the same soil, the same sun, rain, covering, and culture, each abstracts its particular and even opposite nature and nutriment from similar conditions, and the products of each assume the particular qualities of its parent from the same soil, sun, and showers, so different original, innate, mental qualities gather around themselves, both before and after birth, particular kinds of matter, and assume particular shapes, adapted to their respective natures; hence the endless diversity seen in countenances, motions, appearances, size, figure, strength, &c. of mankind." There is no doubt but that climate, soil, habits, customs, and modes of subsistence, in their endless diversity, produce visible and undeniable differences in features, countenances, and complexions, varieties of size and figure, natural propensity and moral feelings of men. Among the Greeks, Empedocles, Epicurus, and various other writers, endeavored to show that parents respectively contribute reproductive fluids which coöperate in generation, and stamp the fœtus male and female, as either is more copious; such was the opinion of many of the ancients, and Lucretius says:—

Et muliebre oritur patrio de semine seclum;
Maternoque mares existunt corpore creti.
Semper enim partus duplici de semine constat;
Atque, utri simile est magnis id, quodcumque creatur,
Ejus habet plus parte equâ quod cernere possis,
Sive virûm suboles, sive est muliebris origo.

"The sex of the offspring," says Draper, "is influenced by the relative age of the parents, the older parent giving a tendency to its own sex. In Europe, for every 106 male births, there are 100 female births."[*] According to Walker, one parent communicates the anterior part of the head, and the internal nutritive system, and the other parent the posterior part of the head, and the locomotive system.[†] He also mentions a family in which the father and mother had only two children, a son and a daughter, who each married into families not related to either party, and have had fifteen daughters without one son, viz. eight by the son, and seven by the daughter.* In the Philosophical Transactions for 1787, mention is made of a gentleman who was the youngest of forty sons, all produced in succession, from three different wives, by one father, in Ireland. Dr. Josiah Curtis of Boston advances the following theories—"During the fecundating period of life the number of the sexes is very nearly equal, much nearer than at an earlier or later period. First marriages produce more male than female offspring; but second or subsequent marriages, especially of females, produce more female than male births. The sexes are much more equally divided in children born out of wedlock; although in most countries where such births are of comparatively common occurrence, there is a small excess of males; but, in Massachusetts, all facts hitherto given show an excess of females among illegitimate births." The proportion of the sexes in children varies according to the relative ages of the parents; thus males preponderate where the father is older than the mother, and the females are in an excess where the mother is older than the father; and the ratio of excess of either sex in birth follows, very accurately, the number of years that the age of the parent of the same sex exceeds that of the other parent.† Temporary vigor, excitement, languor, or debility, may exert a great influence upon the balance of parental power. The conditions of the parents during the year preceding the birth of a child, often determine its future destiny. During this period, either parent, by unusual exertion or excitement, may assume a preponderating influence; thus, in a case occurring within my own observation, the first child exhibited more of the characteristics of the father, the habits of the mother having been sedentary and quiet; but the second child exhibited a preponderance of the maternal traits, the mother having during the year before his birth, passed through scenes of high excitement which developed her energies.

---

[*] Physiology, p. 594.

[†] On Intermarriage, p. 142.

During the nine months anterior to birth, the influence of the constitutional development of both parents is continually operating in proportion to their relative energy of temperament, but many accidental causes may interfere, especially if the constitution of the mother is highly impressible. The circumstances in which she is placed, and the excitement which she undergoes, appear to be often daguerreotyped upon the organization of her offspring. The unborn infant is highly susceptible of nervauic influences, and may be influenced either directly or through the brain of the mother, or by any of the numerous mental and physical influences which affect the mother, even by those which operate entirely through the imagination. Parents, therefore, cannot feel too deeply their responsibility, since every act and circumstance transmits its influence to their offspring, and operates through an incalculable period of time.* The conditions of the mother during pregnancy not only leave their impress upon the child's mind, but they also affect its form of body, so as to produce marks, excrescences, extra limbs, deformities, and even monstrosities. The question whether the state of the mother produces marks, etc., has long divided the medical world, and there is no question concerning hereditary influence, about which there has been so much written, many physicians deciding against the well-authenticated facts which have been presented to their attention. Baptista Porta, in his "*Physiog. cœlestis*," says, "if a great-bellied woman see a hare, her child will often have a hair lip." † Gareæus, *in de Judiciis Geniturarum*, Cap. 33, relates of one Thomas Nickell, born in Brandeburg, 1551, "That he went reeling and staggering all the days of his life, as he would fall to the ground, because his mother, being great with child, saw a drunken man reeling in the street." Martin Wenrichius tells of a man he saw in Wittenburg, who looked like a carcass; upon asking him the cause, he replied, "his mother, when she bore him in her womb, saw a carcass, by chance, and was so sore affrighted by it, that *ex eo fœtus ei assimila-*

---

* Intermarriage, p. 229.

† Nashville *Med. and Sur. Journal*, vol. xii. p. 274.

---

* *Buchanan's Soul of Man.* Vol. vi. p. 256.

† "Ex leporum intuitu plerique infantes edunt bifido superiore labello."—*Physiog. Cœlestis*, lib. v. c. 2.

tus—from a ghastly impression the child was like it." Says Gregory, "There are many diseases or disorders which are born with us, and yet not congenital, namely, while the fœtus was in the womb, the mother may have received severe injury, etc."* Some persons have had ague before they were born. The fœtus in utero is liable to pulmonary tubercles, hydrocephalus, acute inflammation of the peritoneum, small-pox, etc. Dr. Russell, in his "History of Aleppo," mentions a case of a woman who had tertian ague, which attacked her every other day, but on alternate days, when she was well and free, she felt the child shake, so that they both had tertian ague, only their paroxysms happened on alternate days. A writer in the London Lancet, for January, 1861, p. 43, mentions a case in which an impression conveyed to the uterus has been retained and reproduced after a lapse of eighteen months; and argues that the impression may still reappear in future pregnancies. Believers in Animal Magnetism account for these impressions as follows: "Particular things in nature, and characteristics in men, have each their respective forms, adapted to their character, and which they always assume; and secondly, that the *feelings* of the mother are imparted to the child by means of magnetism, which is the agent or principle of life, or rather, *life itself;* that, therefore, the condition of the mother's mind, that is, her magnetism, her life's blood and spirit, are imparted to the child, and cause it to assume the shape peculiar to those things which have magnetized the mother, or whose magnetism the mother has imbibed." Physiology teaches, and observation shows, that parents in a great degree transmit to their offspring their own mental and personal peculiarities; whether the unnatural and immoderate desires and appetites which arise during gestation, should be suppressed or indulged, is still a subject for debate. Dame nature, when allowed to pursue her own peaceful ways, produces harmonious and beautiful objects; but being thwarted in her course, she may run into the wildest freaks.

57 Pearl Street, BALTIMORE, Md.

---

* *Conspectus* I. xlix.

On the Anatomy, and some of the Surgical Diseases of the Urethra.

BY EDWIN FREEMAN, M. D.,
Professor of Anatomy in the Eclectic Medical College of the City of New York.

[*Continued.*]

The prostatic urethra is seriously affected by "hypertrophy of the prostate gland" which surrounds it. I mean, by this, the slow and gradual enlargement of that organ that occurs to those who have passed the fifty-fifth year, or thereabout; which is not the result of any inflammatory action, but is due to an increased formation of the natural tissues of the prostate. It is not common to all who have passed that age, but is estimated to occur to about thirty-four per-cent. of men at, or about, the age of sixty years. This enlargement may occur in different forms, four of which are common, and three are uncommon: 1st, there may be general enlargement equally of both lateral and median lobes; 2d, general enlargement of the gland, but the median lobe the largest; 3d, general enlargement, but the right lobe predominating; 4th, general enlargement, and the left lobe in excess. Of the three less common forms, in the 1st, the lateral lobes only are enlarged; 2d, the anterior commissure alone; and 3d, the lateral lobes and anterior commissure. The most important result that this enlargement produces is obstruction to the flow of urine. In a few exceptional cases, the opposite condition is produced, and the patient is unable to retain his urine, it running off as fast as it enters the bladder. This latter condition is sometimes the result of the retention of urine, producing dilatation of the bladder, and subsequently of its neck, the bladder remaining partly full from loss of power to contract; or the neck may be pressed open by the enlarged lateral lobes being pressed apart by the enlarged median lobe, it pressing as a wedge upwards between them, and allowing the urine to escape. The obstruction to the passage of urine, before mentioned, is owing to the narrowing of the canal of the urethra by pressure upon it of one or more of the hypertrophied lobes of the gland. When the lateral lobes are enlarged, they increase the vertical as well as the antero-posterior diameter of this portion of the canal, as they grow in either direction, while the transverse diameter is diminished by their encroachment. The canal is rendered more or less tortuous also as one lobe or the other is enlarged. Thus if the median increase in size, the direction of the floor of the prostatic urethra will be upwards and backwards, and then nearly directly upwards, as if surmounting a step at the orifice of the bladder. If, in connection with that, the right or left lobe be enlarged singly at the anterior portion, the direction of the canal will be backwards and upwards and to the left or right, and then the prominence of the middle lobe as before. Those possible changes should always be borne in mind in the effort to introduce a catheter when the prostate gland is enlarged.

Symptoms.—This disease is not usually recognized by the patient in its early stage, there being nothing unusual in the act of micturition, or any derangement that would lead him to suspect such a condition. Suddenly, however, an exposure to cold, &c., may cause a complete retention of urine, and this may be the first announcement of the existence of prostatic enlargement. When this is not the case, there may be noticeable a gradual diminution of the force with which the urine is ejected, or the person may have to wait some time before a full stream is fairly established. The desire to urinate is more frequent than natural, the relief is less complete, and is frequently followed very soon again by the same desire. Pains in the thighs, testicles, and groins are complained of, and a sense of weight and uneasiness about the perineum, rectum, and hypogastrium is felt. The straining in the efforts to void the urine may cause hemorrhoids, and a protrusion of the mucous membrane or prolapsus of the rectum may result. As the disease advances, the constant aching or gnawing sensation behind the pubes indicates chronic distension or inflammation of the bladder. There are soreness and smarting in the direction of the urethra, and a shooting pain extending to the glans penis. There may also be occasionally a slight muco-purulent discharge from the urethra. Owing to the growth of the prostate upwards, the depth of the bas-fond of the bladder is increased, and the tightening of the orifice being too strong to be overcome completely by the contractile force of that viscus, it is never emptied of all its urine. That remaining, mixing with the mucus of the bladder, decomposes and becomes the source of increased disease of the parts, the effect of which may be continued up the ureters and involve the kidneys, to the increased distress and danger of the patient; or the decomposing urine may give rise to the formation of calculous matter, generally triple phosphates, which may be mixed with pus, mucus, and urine, forming a thick discharge, with a pungent, ammoniacal, and often fetid odor.

Albumen may be present in the urine if the disease extend to the kidneys, or blood from the urinary passages.

Diagnosis.—It is not well to depend on the mere apparent symptoms of the disease, but an examination should be made of the condition of the prostate gland, by the sound in the urethra, and the finger in the rectum, with the patient lying on his back. The first thing to notice with the finger is whether the disease be general or partial? affecting one or both lobes? and to what extent? and what is the nature and form of the enlargement? Secondly, is the tumor hard or soft, or unequally so in places? Also what is the condition of the bladder behind it? which may be ascertained by pressing upwards behind the gland and tapping with the other hand on the hypogastric region: if the bladder be distended with urine the wave-like impulse will be felt. Thirdly, we should feel for the part of the gland the most tender, either to the right or left or in the middle. Fourthly, the end of the sound should be felt for, to ascertain the thickness of the intervening tissues, if the sound shall have been previously introduced. By the urethra, if a full-sized catheter has been introduced, for the distance of eight or nine inches easily, and no urine flows; and if the handle then has to be more than usually depressed, approaching the horizontal line, there is good reason for pronouncing it prostatic hypertrophy. A catheter with a curve the size of one third of a circle, and of greater length, should then be introduced, which will probably pass more easily; and the direction of the handle should be noticed, which will be opposite to that of the beak, by which the lateral or other curvatures of the canal may thus be ascertained. The best instrument for ascertaining the exact condition of the prostatic urethra and neck of the bladder is a solid or hollow sound, curved about like the common lithotrite.

Diagnosis of the affection from stricture, vesical calculus, tumors of the bladder, atony or inertia of the coats of the bladder, and paralysis may be made thus. In stricture the stream of urine is small, but the force not much diminished, while the contrary is the case in hypertrophy, the stream being quite small. In stricture the obstruction is encountered before six inches of the instrument have disappeared, always before it arrives at the prostatic urethra. In hypertrophy the obstruction is not met until the instrument has passed eight or nine inches, and if it pass into the bladder, the handle has to be depressed between the legs of the patient. Stricture makes its appearance before middle life; hypertrophy in advanced life. The appearance of a little blood in urinating after exercising, is more nearly a pathognomonic sign of calculus of the bladder, than any other; but the sudden stopping of the stream of urine, and pain at the close of micturition, together with a persistent discharge of mucus and pus, should excite suspicions of its presence. Tumors, especially villous, may be suspected from the sanious urine containing flocculi and sabulous matter. Atony of the bladder may be judged of by the diminished power to expel the urine, even after the catheter is introduced, and may be the result of over-stretching or other causes. Paralysis is generally associated with paralysis of the lower part of the body, from injury to the spinal cord, and the patient has no power over the bladder after the catheter is introduced, the urine being only expelled by the pressure of parts lying around.

Treatment.—If there be retention of urine and long-standing distension of the bladder, that viscus should not be completely emptied at once, but by increasing the quantity withdrawn each time: if it be not of long standing, it may be removed at once. The patient should be then instructed in the use of the catheter, which he should use standing with his back to the wall, once or twice a day, the instrument being either silver or flexible, according to the readiness with which it can be introduced, the difficulty being to overcome the tortuosities of the canal or to raise the beak above the middle lobe. The patient should be put under the influence of full doses of Gelseminum, with moderate doses of iodide of potassium. The former agent has an excellent effect on the whole urinary track, being relaxing and anti-inflammatory, it tends to overcome the rigid condition of the *os vesicæ*, and will often enable the patient to do what otherwise he could not do without the catheter. The Potassii iod. is used for its power in reducing the hypertrophied condition of the gland. The ext. Conii mac. with ext. Phytolaccæ and a small portion of iodine, will also be found useful, and may be combined with ext. Nucis vomicæ, if there be atony of the bladder from over-distension. Teas may be administered freely of the Altha off., Uva Ursi, Buchu, Pareira Brav., underground stem of Triticum Repens or Ulmus fulv. for the purpose of allaying inflammation or irritation as well as catarrh of the bladder. Too great acidity of the urine may be corrected by a free use of the citrate or acetate of potassa; an alkaline condition may be changed by the use of Benzoic acid. Quinine and iron should be administered for its general tonic effect on the system. All gloomy reflections upon his condition and its consequences, should be dispelled from the mind of the patient, his habits should be well regulated, and, ever avoiding all excesses, his diet should be plain, substantial and nourishing, being careful never to eat excessively, and to be extremely moderate in the use of tea, coffee, and stimulating drinks. The skin should be kept warm with flannel and comfortable clothing, and in good condition by frequent bathing and thorough rubbing. Counter irritation with the irritating plaster may be applied to the thighs and lumbo-sacral region if deemed beneficial. Attention to such treatment will produce marked relief of the severe symptoms of this disease of the prostatic urethra, and a perseverance in it will, in many cases, give permanent relief.

No. 93 E. 17th street, NEW YORK CITY.

[To be continued.]

Favorite Remedies and Recipes.

BY PAUL W. ALLEN, M. D.,

Professor of Theory and Practice of Medicine in the Eclectic Medical College of the City of New York.

[Continued from the Review *for December.]*

APERIENTS AND CATHARTICS.

No. 5.—Husband's Magnesia.—The great bulk of the officinal calcined magnesia makes it objectionable, not only because of the size of the dose, but also because it is, in rare instances, liable to form concretions in the bowels. The heavy magnesia of Husband, of Philadelphia, and that of Ellis, of the same city, as well as that of Henry, of England, are among the most eligible and excellent cathartics. These several manufactures of magnesia are said to be equally good, but we have always used that of Mr. Husband, and can therefore speak of it from the evidence of personal experirience.

Magnesia is mostly used, in both domestic and professional practice, as an antacid and laxative, and as such all our medical friends are doubtless well acquainted with its efficacy; but we regard Husband's magnesia as one of our most efficient cathartics. In severe cases of bilious colic we have uniformly resorted to it, during the last three years. If the agonizing distress of this disease be accompanied with vomiting, along with the evidence of a foul stomach, we would first give, at once, a lobelia emetic, to clear the stomach and to relax the spasm of the bowels. The stomach being relieved and the spasm relaxed by the lobelia, and by divided doses of dioscorea villosa, we would then, if the vomiting and nausea continued, apply a sinapism to the epigastrium. If the nausea be not very soon relieved, we would quiet the irritability of the stomach by a small dose of morphia, and, in a short time, commence giving Husband's magnesia, in drachm doses, in a little water, every hour. Let the bowels be packed in cloths wrung out of hot water, and repeat this fomentation often; or, use a fomentation of hops, or one of arnica flowers. Of course, in such cases, relaxing and stimulating injections by the rectum are not to be omitted; and we regard an injection of thoroughwort tea, to which a suitable quantity of the tincture of lobelia and capsicum has been added, to be among the most efficacious. But we depend mostly, in such cases, upon the efficacy of Husband's magnesia to open the bowels. It is not at all unpleasant to take, it relieves the nausea, and is seldom vomited. Its action is, of course, greatly promoted by lemonade, and we allow the patient to drink frequently of this excellent anti-nauseant. In this disease, magnesia is less frequently vomited than almost any other remedy; and it is more certain to secure free and quick discharges than any other agent we have ever used.

This agent is also an excellent cathartic in many cases requiring a thorough cleansing of the stomach and bowels. It is excellent in the first stages of fever, correcting the secretions of the entire alimentary canal; and yet it is so slightly irritating as to make it scarcely objectionable in the full stages of typhoid fever—a disease in which all prudent medical men are very careful in the use of cathartics. As an ordinary cathartic, this drachm dose may be repeated once in four or six hours, if the first dose does not operate sufficiently.

As a hydragogue cathartic, it will be found of much value in dropsy. It does not weaken the patient, like jalap and cream of tartar, or like podophyllin and cream of tartar, and yet it sometimes reduces the anasarca more rapidly than either of these preparations. In many cases of dropsy, practitioners have found it almost impossible to repeat cathartic doses of podophyllin, on account of the nausea and irritability of the stomach produced by this efficient remedy;

but this magnesia can be used every second day for a long time, if desired, and it rapidly carries off the dropsical deposit, without producing nausea, griping, or debility. Dropsy dependent upon extensive organic disease of the liver or other organs, is not unfrequently incurable, and can only be temporarily relieved; but, when it is curable, it frequently requires the use of several remedies before it yields to treatment; and, from the few cases in which we have used this remedy in dropsy, we esteem it as one of the most efficient, as it certainly is one of the most agreeable of all medicines. In this disease give to an adult one drachm, in a little water, every two or four hours, until it operates thoroughly, drinking freely of lemonade between the doses.

From recent conversations with medical men, we infer that but few of them are accustomed to give this agent in bilious colic, or as an ordinary cathartic, or in dropsy; and its use in these cases is so valuable that we have made these suggestions in regard to a remedy with all the uses of which, at first sight, it would seem that every medical man would be entirely familiar.

No. 6.—*Compound Powder of Jalap.*—Take Jalap, Spearmint leaves and Senna, of each, pulverized, two ounces. Mix intimately. *Dose*—One teaspoonful, in hot water, sweetened; and repeat in four hours, if the first dose does not operate.

This is far more palatable than the old formula for the "Anti-bilious Physic." It is one of the most thorough and certain of cathartics. It cleanses the stomach almost as effectually as an emetic, and it rarely gripes. It acts well and kindly upon the whole alimentary canal. In the very loaded and foul condition of the stomach and bowels which we often find in the forming stage of fevers, this preparation is invaluable. If used in the exanthematous fevers, or in typhoid fever, let the infusion be taken without the sediment, that there may be no danger of irritation of the intestinal canal. The above formula will be found as agreeable to children as it is efficient; and, in many instances, it entirely supersedes the necessity of an emetic.

PERISCOPE.

The International Medical Congress of Paris.

THE following are the "*Statutes and Programme*" of the International Medical Congress, which is to be held in Paris, this year. We have no doubt but this will be largely attended by American Physicians and Surgeons:

ART. 1. A Medical International Congress will be opened on the 16th of August, 1867, under the auspices of His Excellency, the Minister of Public Instruction.

ART. 2. The Congress, exclusively scientific, will be in session two weeks.

ART. 3. The Congress will be composed of original, home, and foreign members.

The original members shall be the French physicians, who become such on application to the Committee on Organization; the subscription fee will be fixed at 20 francs.

The adjunct members shall be those foreign physicians who communicate their willingness to attend, to the Secretary-General (Doctor JACOUD, No. 4 Rue Drouot, Paris). They shall be exempt from all pecuniary contribution.

ART. 4. The members of the Congress, both home and foreign, shall alone have the right to take part in the discussions.

ART. 5. The work of the Congress shall consist in:

a. Communications on questions proposed by the Committee.

b. Communications on subjects foreign to the programme.

ART. 6. The Committee have decided on the following programme:

I. Pathological anatomy and physiology of tubercle. Tuberculization in different countries, and its influence on general mortality.

II. General accidents which cause death after surgical operations.

III. It is possible to propose to the various governments any efficient measures to restrain the propagation of venereal diseases.

IV. The influence of the ordinary alimentation peculiar to different countries on the production of certain diseases.

V. The influence of climate, race, and different conditions of life on menstruation in different countries.

VI. The acclimatization of European races in warm countries.

VII. On entozoa and entophytes which may be developed in man.

Art. 7. Members, both home and foreign, who desire to make a communication on any of the questions of the programme, or upon any other subject, are requested to address their communication to the General Secretary three weeks or sooner (July 26th) before the opening of the Congress. The Committee will decide as to the time and order in which they shall be brought before the Congress.

Art. 8. The sessions of the Congress will take place daily, Sunday excepted. They will be held alternately during the day, and in the evening. The sessions during the day will last from 2 to 6 o'clock, P. M., the evening sessions from 8 to 10 o'clock.

Art. 9. No question shall occupy more than one session, and the order of business will be regulated as follows: 1. Lecture on the questions of the programme; 2. Discussion; 3. If time permits, communications of miscellaneous essays. The evening sessions will be exclusively devoted to these.

Art. 10. A maximum of twenty minutes will be accorded to each reading.

Art. 11. At the first meeting the Congress will nominate its bureau, which shall consist of a President, Vice-Presidents, a General Secretary, and Recording Secretaries.

Art. 12. After the conclusion of the Congress, the Committee on Organization will resume its functions, to proceed with the publication of the Transactions of the Congress.

Art. 13. All *Memoirs* read before the Congress shall be handed over to the General Secretary after each session They are the property of the Congress.

Art. 14. Students of medicine will receive Cards of admission, but they cannot take part in the deliberations.

All communications must be sent to M. Jacoud, Sec. No. 4 Rue Drouot, Paris.

EDITORIAL.

Eclecticism.

The editor of the Druggist's Circular, in an able article, has given us his views upon the subject of Eclecticism. They are in the main correct, but upon some points not so. The Circular takes the ground that it would be a serious innovation to discard many remedies, because of their having become venerable. This position would preclude advancement, and would consequently be antagonistic to the precepts of Eclecticism as we expound them. If this axiom were adhered to, then, instead of the beautiful facts of combustion as we understand them, we would still be dreaming over the rhapsodies of *phlogiston*. We would still be applying the hot iron to wounds and the fatal lancet to the depletion of that fluid which is vitality itself. It was but a brief time ago—as the editor of the Circular will perhaps recollect—that the lancet was universally applied. Will the editor point us out a physician who now uses it? If so, it is doubtful whether the latter will acknowledge it. The use of calomel was universal a few years ago, but it has gone into disuse considerably of late. This is the case, likewise, with several other obnoxious metals, which were considered a few years ago as indispensable. It is to the spread of eclecticism that these enlightened changes are due. This school were the first to prove that other remedies exist whose action upon the liver is fully as energetic and beneficial as calomel, while those dreadful after-results termed "mercurial diseases" are avoided. It was through the writings and teachings, and successful practice of eclectic physicians, that blood-letting has gone into disuse. But we must not attribute it all to eclectic influence, for, although they were the pioneers in their denunciation of the lancet, it was to the influence of the spread of a more correct knowledge of the important office the blood subserves, that this deadly practice was abandoned; for such is the perversity of old school physicians, and such the fatal effects of prejudice, that the teachings of all the enlightened Eclectics in this country would have made no favorable impression upon them, had not the progress of chemistry—especially in its relations to physiology—driven them to the abandonment of the lancet. This same progress of chemistry has taught the Eclectics that there is great danger in administering metals which do not form a component part of the human system. It has been ascertained by Eclectics, and has never been disproved, nor ever can be, that after the administration of any obnoxious metal (or metal not forming a part of the system), it combines with the tissues of the body, forming an insoluble compound which remains there for life, being a constant source of irritation and creating those phases of maladies termed "mercurial diseases." That this is the result of the administration of these metals, may be rendered absolutely certain from the fact that they may be *electrolyzed* from the system. If these metals remained in the system *as metals per se* they could not be electrolyzed; but in order that they shall obey the dictates of the voltaic current, they necessarily must be in a state of combination. Eclectics have electrolyzed mercury and other metals out of the system after having remained there for twelve years. These and other cases have been published by us years ago. Why did they not elicit a response from the old-school journals? Does any one suppose that if these old-school doctors had tried the experiment, and had got the negative result of non-success, they would have preserved their characteristic reticence? Nay, it was because they *did* succeed that their silence upon the subject is so profound. One old-school physician, more philosophical and honest than his brethren, wrote to Prof. Sanders (the discoverer of the electrolysis of metals from the system), for information upon the subject. He duly received the information sought, tried the experiments, succeeded with several metals, and published his successful results in the *Indianapolis* (Indiana) *Journal.* Since then, the French Academy have found these Eclectic discoveries correct. They have announced them as such—and still allopathy administers these noxious metals in the face of these astounding facts!

Eclecticism, therefore, as we expound it, consists in subjecting every theory, and its practical results, to rigid scrutiny, assisted by the present advanced state of science. If a medicine possess a good quality—but combined with it, some fearfully pernicious ones,—and if another medicine be discovered which has all its virtues, but not its faults, we discard it, and adopt the latest one discovered. This is the case with calomel. That good and enlightened physicians have used it is true, but that is no reason why it should not be discarded if a better remedy can be substituted for it. Thus the CIRCULAR will perceive that Eclectics are not the medical iconoclasts it would believe. They do not tear down through wantonness, but before they attempt to overthrow they first erect a superior structure. Without organizing themselves into societies, and forming by-laws which hedge in all inquiry and experiment, they leave every one free to do just as his judgment dictates. They throw no proscription around the man who advocates a new remedy, or the overthrow of an old one. The student of their Colleges is taught "to try all things and hold fast that which is good." He is environed by no resolutions pledging himself to return his Diploma, if he dare to deviate from the dogmas laid down by his preceptors;—but free and untramelled he issues from our medical halls—a slave to no creeds, admitting no tyrants in medicine, and with the true American spirit of independence flung about him. He is enjoined to rely upon his own judgment; to lay all professional prejudices aside, but, irrespective of what old Medicine may say, to use those appliances which experience may prove the best.

Eclectic physicians, therefore, claim with truth, that they are in advance of Allopathy. They do not claim that they are more educated than their old-school brethren (although equally so), but they claim, that being free of enslaving creeds, and of professional prejudice, they are more fully prepared to advance, and to tread in the van of scientific progress. The founders were not men who set themselves up to dispute the creeds and practice of the old school, without sufficient qualifications for that task. They were graduates of old schools; had spent many years in practising upon the old system, and were only driven to abandon it, after experience had taught them that to practise medicine upon these principles was little less than criminal. Hence rose Eclecticism.

As it has been denied strenuously that the metals will form stable compounds with organic matter, we think it advisable to set this question at rest, by adducing some of these combinations. There are three bodies belonging to the *zinc* series of organic compounds known. They are zinc-methyl, zinc-ethyl, and zinc-amyl. In these substances the metal zinc is combined respectively with two molecules of the radical methyl ($C_2 H_3$), ethyl ($C_4 H_5$), and amyl ($C_{10} H_{11}$). These substances are very stable. *Magnesia* combines in the same manner as the zinc. *Aluminum* and *glucinium* likewise form with these organic radicals stable compounds. This is the same likewise with *tin*, which forms a greater variety of compounds than either of the above. *Bismuth* forms with organic matters very stable compounds; also *lead*, whose compounds are very stable. *Mercury* is the most prone of any metallic substance to combine with organic matter. It forms a variety of these organico-metallic substances. In fact its affinity for organic matter is greater than either of the above metals, and it appears to combine at a lower temperature than the others, forming at the same time more stable combinations. *Antimony* forms very stable compounds with organic matter. Equally stable organic compounds have been formed likewise by the metals *cadmium* and *arsenic*. *Tellurium* has also been combined with organic matter. These are all prepared by union of the organic radical, *in statu nascenti*, with the metal. By observing the above, it will be perceived that late discoveries have revealed the fact, that metals possess a very powerful affinity for, and tendency to, combine with organic matter, and to form combinations which, for stability, are not surpassed by any purely organic compounds. These facts, together with the fact that metals can be electrolyzed from the system after having lain there for a series of years, are of startling import. They prove, beyond disputation, that those metals which do not form a component part of the body, are prone to form, at a temperature not over 98° F., very stable compounds with its tissues: that these compounds possess such stability, that all the efforts of vitality, renewed unceasingly for a series of years, cannot disrupt them: and that it requires the force of a very powerful voltaic current to effect this. And we are struck with one fact worthy of notice—that only those metals *which do not belong to the system*, are prone to form these metallic compounds. Is not this sufficiently significant, or will Allopathy never learn!

We trust that the learned editor of the *Druggist's Circular* will reflect upon these things, when we dare to predict that his next article upon Eclecticism will be a very able and useful one.

"A Remarkable Case of Gunshot Wound."

A CERTAIN Dr. Jas. S. Athon, of Indianapolis, Ind., has reported what is called "a very remarkable case" of gunshot wound of the bladder, in a boy nine years old. We notice this to call attention to the spleen displayed by him against a brother member of the medical profession; and to show that, while he pretends to be of the "regular faculty," he displays, in his report, a series of inconsistencies and lack of proper anatomical knowledge, not surprising to those who know how superficial he is. It is surprising to us, however, that a journal of the pretensions and high standing of the American Journal of Medical Sciences, should transfer such a report, *verbatim et literatim*, to its pages. The doctor (Jan. No., 1867) says: "The wound was produced by a pistol ball, which entered along the posterior margin of the tuberosity of the ischium, and passed into the bladder, near its fundus, coming out an inch and a half or two inches above the pubes, immediately in the linea alba." "The shock of the injury almost immediately prostrated the little fellow, and he was given up as lost. The urine at once escaped, mixed with blood, from both orifices, and the feces passed away involuntarily." * * * "A physician was called in, who, after examination, pronounced the wound necessarily mortal, but gave something to ease pain. An eclectic physician was called, who plunged the largest sized silver catheter into the urethra, and, with vigorous efforts, succeeded in thrusting the instrument, not into the bladder, but into the membranous portion of the urethra, when the screams and contortions of the patient were so piteous, that he was compelled to abandon the operation." It is here very evident that Dr. A. has made a "vigorous effort" to give birth to a mountain, but only brought forth the smallest kind of a mouse, so dirty that his fingers must still stink of it. If the doctor will read his own article, a little further on, he will find, that he admits that the first thing to be done, was to *try* and pass a catheter into the bladder, and that afterwards he was so convinced of the necessity of it, that he introduced it "every other day for a month, and every time the instrument was *forced* further until it entered the bladder; but he took care to give chloroform to keep down the "screams and contortions" of his little patient. But there is one thing that requires special notice, and that is, the profound anatomical knowledge displayed by the doctor. He says that the eclectic "thrust the instrument, not into the bladder, but into the membranous portion of the urethra." We would like to ask if the membranous portion of the urethra is not a portion of that canal leading to the bladder? and how he could get the catheter into the bladder, unless *via* the membranous portion of the urethra? The eclectic stopped, of course, as he should have done, in the membranous urethra, when he found that he could not readily pass the instrument into the bladder without causing excessive pain. It seems that after this, a member of the "*regular faculty*" was called in, and pronounced the patient "*in articulo mortis;*" of course he being *regular*, his diagnosis and prognosis must not be doubted. Dr. A. should inform us how many days he was in that condition before he was called in, which great event occurred on the tenth day from the injury. He says, "the feces were evacuated in bed and removed as best they could, by means of cloths and water." We are glad to learn that some of the "regular faculty" have so far overcome their prejudices, as to use water for some purposes. But mark, there was involuntary passing of the feces, and the patient was "*in articulo mortis*," and the first thing he gave was castor oil. I suppose, if the boy had been dead, he would have been ordered *to take oil.* He ordered him Quinine and Hyosciamus, and on the third day the pus and urine were passing from the wound in the same quantities, and the patient had had some ease. The doctor now begins to understand the necessity of passing a catheter to the bladder, to get the urine through the right channel, as the wound will never heal unless this is done. So he tries the operation of *forcing* it in, having put the patient under the influence of chloroform. He, however, had to withdraw it, as the eclectic did, for there is no doubt there was a stricture of the urethra, from the wound. He says that no obstruction was met until the instrument "came into the vicinity of the membranous portion of the urethra." Why not speak definitely, Doctor, as though you know where it is, and say, came *to* the membranous portion of the urethra. Notwithstanding all this difficulty and pain, he says that the catheter was introduced every other day for a month, each time forcing it further, until it entered the bladder. Thus, he had at last to resort to the same measures that he blamed the eclectic for doing promptly, before the inflammation had rendered the parts indurated and difficult to be penetrated. * * * He says further, "the frequent introduction of the catheter had blunted the sensibilities as well as enlarged the urethra." Why, then, blame the eclectic for introducing it *once?* "The urine and pus now began to escape from this orifice, which, notwithstanding the injury received in its membranous section, retained the fluid in the bladder until voided by the voluntary act of the patient." Who ever heard of the urethra being called an orifice? or of its retaining the fluid (urine) in the bladder? We would inform the doctor that the bladder has a *sphincter vesicæ*, which is supposed to close its neck, and relax at the will of the person, and by means of that the urine is retained. It is very evident that in trying to make out malpractice of the eclectic, Dr. A. has only developed a degree of ignorance on his part that is by no means excusable in one of the "*regular faculty*," while all other journals, in their haste to make out a case, lower themselves by conniving at his ignorance. Is this the same Dr. Athon who was hoping to become governor of Indiana, if the loyal Governor Morton had accidentally ceased to live, at the time of the celebrated conspiracy at Indianapolis?

NEWS AND MISCELLANY.

MASSACHUSETTS ECLECTIC MEDICAL SOCIETY.

[*Reported for American Eclectic Medical Review.*]

THE sixth semi-annual meeting of this society was held at the Revere House, Boston, on the 9th of January, at 10 A. M., W. Bass, M. D., President, in the chair. The meeting was fully attended, and was interesting in all its proceedings.

The records of the annual meeting were read by the Secretary, Dr. Miles, and approved.

Dr. J. S. Andrews, of Taunton, presented an essay on "The Hepatic Secretions;" Dr. Skinner, of Stoneham, an essay on "Eclecticism," and Dr. Aldrich, of Fall River, an essay on "Epidemic Dysentery."

These papers were severally referred to the Publication Committee.

The following was presented by Dr. R. W. Geddes:

RESOLVED, That a committee of three be appointed to investigate and report the best solvent or solvents, aside from alcohol, with the view of substituting the same for that costly article in the manufacture of our remedies. Adopted. Committee—Drs. R. W. Geddes, G. W. Skinner, and Prof. P. W. Allen.

Edson C. Chamberlin, M. D.; Otis Humphrey, M. D., of Boston, and Edwin Schofield, M. D., of Worcester, passed the required examination, and were admitted to membership in the Society.

At 2½ o'clock P. M. the Society adjourned for dinner, which was partaken of at the Revere House, Dr. Underwood presiding, Divine blessing being invoked by Rev. Dr. Skinner.

At 3½ the Society again reassembled.

Dr. Humphrey, of Boston, reported a case of labor very long protracted from a scirrhus *os* which was much thickened. A suppository of ext. lobelia, grs. iv., was introduced within the rectum; dilatation soon took place, and the labor terminated favorably to both mother and child.

Dr. Burnham detailed a case of post mortem where the patient died of aneurism of the aorta. The patient had been able to keep about most of the time till recently; raised himself in bed an hour previous to his decease; and yet the eleventh and twelfth vertebræ, with their intervertebral cartilages, were nearly destroyed.

The Society adjourned at 5 P. M.

The next annual meeting will be held in Boston on the first Thursday in June next.

Boston District Eclectic Medical Society.

[Reported for American Eclectic Medical Review.]

The sixth annual meeting of the Boston District Eclectic Medical Society was held at the office of Dr. Joseph Jackson on Monday evening, January 7th, at 7½ o'clock, Dr. Jackson, President, in the chair.

The records of the previous meeting were read and approved, and the records of the last annual meeting were also read.

Dr. S. Ames, Treasurer, made his annual report, which shows the finances of the Society to be in an excellent condition.

The following gentlemen were elected officers for the ensuing year:

Joseph Jackson, M. D., President.
W. E. Wright, M. D., Vice-President.
C. E. Miles, M. D., Secretary.
S. C. Ames, M. D., Treasurer.

Board of Examiners—Drs. W. E. Underwood, A. E. McDonald, H. G. Barrows.

Drs. J. W. Towne and H. G. Newton were proposed for membership in the Society.

Dr. S. C. Ames was appointed essayist for the next meeting.

Dr. Ames reported a case where a child born at full time showed that it had small-pox while in utero, the mother having had the disease in the seventh month of her pregnancy.

Dr. Miles detailed a case where he had aided in holding a post mortem, where the patient had died of spinal disease and lumbar abscess on the right side. About six weeks previous to the death of the patient a barberry had passed out of the abscess, and there had been liquid fæces found in the same place. This abscess had no connection with the spine. The appendix vermiformis was found turned posteriorly on itself for about half an inch at its free extremity, and resting near the outer edge of the abscess. At this point of the appendix an aperture was found of the size of a crow's quill, through which the fæces had passed. On the inner extremity of the left thigh, about three inches below Pourpart's ligament, there was an opening some three inches in length, which had discharged freely. This connected with the spine by a large sinus. The superior surface of the promontory of the sacrum, the inferior and superior face of the last lumbar and the inferior face of the next lumbar vertebræ, with their intervertebral cartilages, were nearly destroyed.

The Society now sat down to an excellent collation, prepared by Dr. Jackson, and after the enjoyment of a social hour, adjourned to meet at the office of Dr. W. E. Underwood on the first Friday in June.

What is the American Eclectic System of Medicine?

There are few who have any accurate conception of the American Eclectic System of Medicine, excepting those of the medical profession who have studied and carried out the new system. It is not a special, exclusive theory of medicine, based upon one principle, requiring a certain degree of fixedness and uniformity of doctrine in its followers. It is not a perfect and finished system of science, like geometry and arithmetic, embracing a certain number of truths which can neither be modified nor increased. It would be but folly and dogmatism to claim such perfection for any medical system. It is not a systematic routine of practice, which may be learned like the alphabet, and adhered to forever. It is not, in any sense, a finished, fixed, or stationary system. On the contrary, it is a system of progress. It is not a system governed by any one dominant idea, theory, or measure. On the contrary, it is a comprehensive system which tolerates all ideas, and recognizes all contributions of science, as well as all the principles of healing which legitimately belong to the healing art.

It is, therefore, not a scientific system, in the sense in which that term is used by system-makers, theorists, and routinists, but is rather a comprehensive mass of science, the central principle of which is benevolence, and which embraces everything connected with the healing art, as the solar system embraces not only the greater planets, but the asteroids and minor bodies which revolve around the sun.

A truly eclectic medical mind should be like a cyclopedia, embracing the whole circle of medical science, and not like the systematic treatises put forth by different schools—a mere presentation of the views of a particular portion of the profession.

It has been the fashion to designate the medical parties by names ending in the termination *-path* or *-pathy*, which refers to disease. Thus, those who treat diseases by remedies having an analogous character, and capable of producing symptoms similar to the disease treated, are called Homœopaths. Those who disregard the Homœopathic law, and use remedies producing effects different from the diseases to which they are applied, have been called Allopaths; while those who disregard the question of analogy or difference, and treat diseases by water alone, are called Hydropaths.

The Eclectic physician is not an Allopath, for he cares nothing about the question of differences or similitude, if his remedies are capable of curing disease. Although he uses water freely, he does not confine himself to the water-treatment. On the contrary, he claims the right to use everything that is useful, whenever, in his judgment, it will benefit his patient.

There are three principal relations which medicine may sustain to disease: that of resemblance, as when we hold a part which has been burned to the fire to cure it; that of specific antagonism, or Antipathy, as when we apply ice or cold water to a burned surface; and that of general difference, which may be illustrated by the application of spirits of turpentine to a burn.

Now it is obvious that the first dictate of common-sense is to treat an injury by something of an opposite character, as when we apply cold water to cure a burn, or an anodyne to relieve pain. Still it is well known that burns may sometimes be relieved by holding them near the fire, and that a frozen part is sometimes benefited by rubbing it with snow. The Eclectic physician practises freely by the antipathic law, as when he gives a cathartic to relieve constipation, tonics to relieve weakness, anodynes to relieve pain, stimulants to restore warmth and circulation, and antispasmodics to overcome muscular contraction; but, at the same time, he finds it practicable, occasionally, to quiet the stomach, not by an aromatic or carminative, such as peppermint, but by a small dose of some emetic substance; or to overcome a diarrhœa by a medicine of a cathartic character; or to relieve an inflammation by the application, not of ice, but of warm water.

It is obvious, therefore, that none of the fashionable *pathies* express the objects of the practice of an Eclectic physician. On the contrary, he adopts all the *principles* of treatment he deems appropriate; his system is properly a system which uses medicines in every relation to disease that may be made curative. We may, therefore, put our nomenclature into a fashionable shape, by saying that the American Eclectic system is a system in which its votaries have the largest liberty to choose, and which denies the right of any society or college to dictate a medical creed, or a limited routine of practice to the profession, since every physician should always be ready to use any remedy which he has found to be useful, no matter whether colleges, societies, or authors have recommended it or not.

Such is the *philosophic system* of Eclecticism. But, in a *practical* point of view, we might give a more simple and equally truthful definition. The American Eclectic system is the protest of American common-sense and experience against the traditional dogmas, the antiquated theories, and the aristocratic rules which have cramped and degraded the medical profession.

The healing art has been progressing slowly for ages. In every generation new discoveries are made, and old absurdities are laid aside. In our own country, the independent spirit of the people, and the habits of free inquiry which are fostered by public institutions, have led a large portion of the profession to disregard, in practice, the extravagant theories which they were taught in the schools. Thousands of experienced physicians have discovered in their practice that the doctrines of their teachers produced unsatisfactory results, and have been compelled, by a sense of duty, to abandon the pernicious practices of bleeding and salivating their patients. Finding then that they were far more successful in following their own common-sense and observation than in blindly obeying authority, they were encouraged to go on in additional changes and improvements; and, as they were often in villages or country places unable to obtain a sufficient supply of all the officinal remedies, they were compelled to resort to the native plants which they found growing about, and which had been successfully used in domestic practice or by the aborigines. This independent course was rewarded by an astonishing success in practice. They discovered new articles for the materia medica, the use of which had not yet been known in the colleges; and by the use of such remedies, guided by their own independent sagacity, they were enabled to accomplish wonderful cures, where the most learned graduates, fresh from London, Paris, and Philadelphia, had signally failed.

The progress, however, of these democratic improvements in the profession, mostly effected by individuals who had never written a book or occupied a professional chair, was regarded with great jealousy by the leading authorities of the profession. A violent party-spirit was aroused, and physicians who were known to have discarded mercurials and bleeding for the sake of using the more safe and efficient remedies furnished by our indigenous plants were violently opposed and treated with great indignity, as if they had been guilty not only of errors of opinion, but of degrading, unprofessional, or immoral conduct; and so violent, in many instances, was the opposition to these innovations, that no physician could be recognized as a respectable member of the profession who would not consent to administer calomel to his patients, in accordance with the dogmas of the schools. The independent physicians, who discarded calomel and bleeding, were freely and generally denounced by their rivals as empirics and quacks, and stringent laws were passed in many of the States to exclude them from practice, and compel every member of the profession to submit to the control of its leading societies. Fortunately, however, the spirit of liberty was too powerful for all such combinations, and every State in the Union, which had allowed its statute-book to be disgraced by such laws has repealed them absolutely, in accordance with the remonstrances of the people—even the medical profession, in many instances, acknowledging the justness and propriety of their repeal, and the absurdity of endeavoring to control men's opinions in medicine by the power of legislation.

From the peculiar manner in which various changes and improvements have been effected, it is obvious that this great American reform is not a matter of *philosophical theory*, the product of a single mind, but rather a matter of *clinical experience*, the result of a vast number of observations by intelligent physicians in every part of our country. This great American reform, in its unity or consistency, arises solely from its truth; for, if a great number of independent observers agree in their experience, recommending certain changes and improvements in medical practice, it is exceedingly improbable that they should be mistaken, or that their system should not be a great improvement upon its predecessor. In fact, nothing but the consciousness of truth and the encouragement of success could have induced so many American practitioners to brave the odium of innovation and the annoyance of medical proscription by organized and powerful societies.

Originating thus, the American Eclectic System of Medicine may justly claim to be the most advanced condition of medical science, combining the scientific research and learning of Europe with the practical skill and medical improvements of America.—*Medical Tracts.*

ECLECTIC MEDICAL SOCIETY OF THE CITY OF NEW YORK.

THE regular monthly meeting of this Society was held at the College Building, No. 135 East 26th Street, on Wednesday evening, January 16th.

Prof. J. Milton Sanders was elected a member of the Society.

Prof. J. M. Youart read an elaborate essay on "Inversion of the Uterus." The causes, symptoms, degrees, and treatment of this affection were fully stated, and cases which had occurred in his practice were given in illustration. Chronic cases of this affection, and also cases connected with adherent placenta, with their complications and treatment, were related by Drs. Newton, A. B. Whitney, and Allen, and also by Drs. Smith and Firth, of Brooklyn. The literature of this subject was also discussed, and many valuable facts were elicited.

Dr. Firth detailed a treatment for Asthma, which he had found very efficient in certain varieties of this affection; and Dr. Smith corroborated the efficacy of Dr. Firth's treatment by his own success in the use of the same and similar remedies. Prof. Youart also reported cases of long standing which had been cured, and Prof. Newton suggested to the Society a new remedy, not yet fully tested, but which thus far secured the best results of any remedy he had ever used.

Drs. H. M. Sweet and W. R. Hayden were appointed essayists for the next meeting.

PAUL W. ALLEN, *Secretary.*

BROOKLYN ACADEMY OF MEDICINE.

BROOKLYN, Jan. 2, 1867.

THE Brooklyn Academy of Medicine held its regular monthly meeting at 100 Clermont avenue, January 2, at 7½ o'clock P. M., President D. E. Smith, M. D., in the chair.

After the transaction of the usual business, Prof. William W. Hadley read a very elaborate and ably-written paper on the subject of poisons. Those poisons usually employed as medicines he classified in accordance with their peculiar action or the effect they produced when employed to meet certain pathognomonic indications. The essayist demonstrated very conclusively how the most violent poisons could in small doses be judiciously given, and also how simple and (under ordinary circumstances) harmless medicines can be productive of much injury, and even death, when injudiciously employed. The doctor ignored mercury, antimony, lead, and similar mineral poisons, upon scientific grounds, as being incompatible with the laws of life. He claimed that the physiological effect of all vegetable poisons, when administered in medicinal doses, are but transient, and when they accomplish their object by restoring nervous energy and equalizing the circulation of the blood, pass off without permanently deranging the "vital force" or disorganizing any tissues. With metallic poisons, however, the result is frequently different. If they do remove disease by virtue of their own peculiar influence, they subsequently lay Nature under obligations for their removal from the system, which oftentimes, owing to her enfeebled condition, she is inadequate to accomplish. Mercury, indeed, frequently remains in the system in the form of oxides and chlorides, and even in its metallic state, and no vital action, however vigorous, is capable for their removal.

The paper was listened to with interest, and at its close called forth an animated discussion.

Prof. Paul Allen referred to the prize essay of Dr. Ives which was read before the last session of the State Medical Society of Connecticut (Allopathic). Dr. Ives has taken the same ground upon which electics have stood for thirty years, viz.: that mercury in any of its forms is not only useless but also a curse to humanity. What is remarkable, in this paper Dr. Ives has assumed that mercury exerts no influence on the biliary secretions, and has furnished a large amount of testimony and experiments to prove his position.

Dr. H. E. Firth trusted that as eclectics we would investigate all subjects of medical interest in a spirit of liberality. He had not used mercury in any of its forms (save in one instance) during a practice of over twenty years. He does not oppose its use because of the prejudice of early education, but his objections are based upon the ground of principle; that its use is contra-indicated by the law of therapeutics. We hold ourselves open at all times to the investigation of any claims that the advocates of these poisons may present, but our present faith is, and the evidences are multiplying which strengthen that faith, that the advocates of mercury, antimony, lead, and kindred metallic poisons will meet the same fate that those of blood-letting have, and eventually yield to the spirit of progress and scientific medication.

Dr. Whitney had for many years abandoned the use of mercury, and has lost all faith in it as a remedial agent; he does not believe it acts upon the biliary secretions.

Dr. M. Hermance said that he was a living specimen of the painful effects of mercury administered when young; he is a "walking barometer," and is compelled to husband his strength and abridge his labors in consequence of a delicate constitution that might have been otherwise had it not been for the effects of mercury; he expected to carry to his grave the painful influence of this curse of humanity; but, as long as life is spared him, he will labor both in heart and voice until mercury shall become with the old school what it is now with the eclectics—altogether discarded.

Dr. D. E. Smith read a very instructive paper upon the medical properties of the *dioscoria villosa* (wild yam or colic root). Its use, as also its discovery, belongs to the eclectic school of medicine. It is one of the most reliable medicines for that heretofore dangerous and painful disease, bilious colic (or colic in any form) that has ever been brought to notice. It is also valuable in gastritis and other painful diseases of the stomach and bowels. In colic, however, it is that its effects are the most remarkable. Abundant evidence is now had from hundreds of eclectic physicians to establish the fact that no other medicine heretofore known for the relief of colic is half so valuable. What adds still further to its merit, it is perfectly harmless and may be used in doses at pleasure.

The Doctor has submitted the plant to a great variety of chemical tests, and exhibited to the Society a number of distinct products obtained from the plant. There is a concentrated preparation put up by eclectic pharmaceutists called dioscorine.

A. B. Whitney reported a case of excessive secretion of milk, accompanied with mammary abscess, which called forth some very pertinent remarks from Prof. Youart; he claimed that mammary abscess most frequently had its origin in excoriated nipples, the inflammation of which extended along the lymphatics until the deeper tissues were involved. The pain consequent upon nursing the child frequently deters the mother from applying it to the breast until congestion and consequent inflammation is the result.

Drs. H. E. Firth and M. Hermance were appointed essayists for the next meeting, and Professor Paul W. Allen requested to deliver an address before the Society at the annual meeting on the first Wednesday in March, 1867, due notice of which will appear in the newspapers.

H. E. Firth, Secretary.

Eclectic Medical Association.

Indianapolis, Oct. 8th, 1866.

Whereas, Dr. J. M. Youart has been called from us to a professorship in the Eclectic Medical College of the City of New York, and

Whereas, he has sustained himself as a reputable and successful practitioner of Medicine and Surgery in this city, and

Whereas, he has proven to be a valuable co-laborer in Medical reform in the Eclectic Medical Association of Indianapolis, therefore

Resolved, That the members of this Association tender him their cordial regards for his efforts to build up on a reputable basis the Eclectic practice of Medicine here as elsewhere, and that he has our best wishes in his new field of labor, and we take pleasure in recommending him to the Faculty and students of the Eclectic Medical College of the City of New York, and to the public at large of the metropolis of America as a trustworthy, successful and skillful physician and surgeon.

E. Huntsinger, Sec.

The Body of Jeremy Bentham.

The London *Notes and Queries* contains a letter from the late Dr. Southwood Smith, in relation to the disposal of the body of Jeremy Bentham. The letter is dated June 14th, 1857, and says: "Jeremy Bentham left by will his body to me for dissection. I was also to deliver a public lecture over his body to medical students and the public generally. The latter was done at the Webb Street School—Brougham, James Mill, Grote, and many other disciples of Bentham being present. After the usual anatomical demonstrations over the body, a skeleton was made of the bones. I endeavored to preserve the head untouched, merely drawing away the fluids by placing it under an air-pump over sulphuric acid. By this means the head was rendered as hard as the skulls of the New Zealanders, but all expression was gone, of course. Seeing this would not do for exhibition, I had a model made in wax by a distinguished French artist, taken from David's bust, Pickersgill's picture, and my own ring. The artist succeeded in producing one of the most admirable likenesses ever seen. I then had the skeleton stuffed out to fit Bentham's own clothes, and this wax likeness fitted to the trunk. This figure was placed seated on the chair on which he usually sat, and one hand holding the walking-stick which was his constant companion when he went out, called by him Dapple. The whole was enclosed in a mahogany case, with folding glass doors. When I removed from Finsbury Square, I had no room large enough to hold the case; I therefore gave it to University College, where it now is.

KING'S CHRONIC DISEASES.

In answer to many inquiries, I can say that the work is passing as rapidly through the press as Professor John King can read the proof. As it progresses, I am more and more surprised at the richness of the subject, and the ease with which the author has handled it. It is eminently practical in every part, and the direction for treatment and preparation of remedies is given with great care. It has been the aim of the writer to place in the hands of Eclectics everything of known value in the management of chronic diseases, and thus add to the reputation we have always had in the management of these affections.

In illustration of the method employed, I will give a list of subjects taken up in the introduction, which comprises over a hundred closely printed pages:

Temperaments; Diet; Drinks; Ventilation; Air; Clothing; Shampooing; Frictions; Exercise; Sea Voyages; Electricity; Galvanism; Electro-galvanic Instruments; Light; Heat; Pulvermacher's Chains; Society; Passions; Mental Influences; Generative Functions; Sleep; Baths; Douches; Medicated Baths; Electric Baths; Attentions to the Skin; Attentions to the Bowels; Attentions to the Kidneys; Urine and its Indications; Constituents of Urine, etc.

Let it be borne in mind that each one of these receives full consideration, and is constantly referred to through the body of the work, as the different diseases pass under review, and the reader can appreciate the richness of the volume and its value to the practitioner. Subscriptions are now being received for early copies of the work, which will be forwarded in the order in which they are received. Price $15. —*Ec. Med. Journal*, Cin.

FOR SALE.

An Eclectic Drug Store (in Brooklyn), nineteen years established, well stocked, and now doing a good business, will be sold on very reasonable terms. Inquire of D. E. Smith, M.D., Brooklyn, N. Y.

AMERICAN

ECLECTIC MEDICAL REVIEW;

A Monthly Record of Medicine

AND

THE COLLATERAL SCIENCES.

Vol. II. MARCH, 1867. No. 10.

ORIGINAL COMMUNICATIONS.

Modern Synthetic Chemistry.

A LECTURE DELIVERED BEFORE THE CLASS OF THE ECLECTIC MEDICAL COLLEGE OF NEW YORK CITY.

BY PROF. J. MILTON SANDERS, M. D., LL. D.

> And we thus made acquaintance, in germ, with a principle, from which, as a living seed, the mighty growth of modern chemistry has mainly sprung.
>
> Prof. Hoffmann.

> The time has now come when we may, with advantage, pick up the dropped links, and add them to our chain. The study of more complex structures will prepare us for the investigation, upon which we must enter, of an almost infinite succession of complex bodies, so numerous and ever-multiplying, that he who desires to be a master in chemistry must be content to remain, his whole life through, a hard-working student of their legions.
>
> Ibid.

It is well known that organized substances have been formed in the laboratory by the destruction or breaking up of still more complex substances; but it is only quite lately that these compounds have been formed constructively by the synthesis of less complex bodies. This forms the distinctive feature between modern and past chemistry. Of late years chemistry has made wonderful advancement. It was a standing axiom that no organic substance could be produced, only by the destruction of some body more complex in its constitution than the body produced. The ultimate constitution of the most complex organized substance is now well understood by the chemist, and, taking the chemistry of nature as his guide, he has at length learned the method of building up instead of tearing down, so that complex molecules may now be constructed from those of the greatest simplicity—nay, from the elemental atoms themselves, without having any recourse whatever to organic nature. The following tabular view of a few substances possessing complicated formulæ may be of interest to you, as they are the results of natural metamorphosis of the tissues of the body:

Methylamine,	$C\ H_5\ N$
Urea,	$C\ H_4\ N_2\ O$
Glycerine,	$C_2\ H_5\ N\ O_2$
Taurine,	$C_2\ H_7\ N\ S\ O_3$
Melamine,	$C_3\ H_6\ N_6$
Sarcosine,	$C_3\ H_7\ N\ O_2$
Kreatine,	$C_4\ H_9\ N_3\ O_2$
Leucine,	$C_6\ H_{13}\ N\ O_2$
Tyrosine,	$C_9\ H_{11}\ N\ O_3$

I will make a few remarks upon the nature and composition of some of the above substances. Leucine is a product of the use of, and which presupposes the waste or metamorphosis of the glandular tissue. The chemist can now produce it artificially by breaking up a variety of animal substances, such as skin, muscle, ligaments, hair, feathers, bone, &c. But he can likewise produce it constructively by a synthesis of less complex organic substances, irrespective of the aid of the vital force. It may be produced by combining valerianic aldehyde, water, and hydrocyanic acid:—

$$H_2\ O,\ C_5\ H_{19}\ O,\ C\ H\ N = C_6\ H_{13}\ N\ O_2,\ \textit{Leucine.}$$

Taurine has been detected in the glandular tissue, and especially in the lungs. It may be found in large quantity in the bile, conjugated with cholic acid. This Taurine, it will be observed, contains sulphur in its constitution, and that it is very complex. By the action of sulphuric acid, ammonia, and alcohol, Taurine may be built up; and as each of these substances may be formed from the elementary atoms, we really get this complex organic body from charcoal, sulphur, oxygen, hydrogen, and nitrogen. The other substances in the table may be formed synthetically in a similar manner.

Before I attempt any farther to trace the composition and the manner of the building up of the complex organic compounds, it will be necessary to make a few remarks upon the three typical bodies upon which they are built. Among the sixty-odd substances in nature, recognized by chemists as elementary, only four of them are gaseous, viz.: hydrogen, oxygen, nitrogen, and chlorine. The primary chemical types are built of these four gaseous elements, all being considered as hydrides—the chloride of hydrogen, or hydrochloric acid, oxide of hydrogen, or water, and nitride of hydrogen, or ammonia.

Let us look at these substances in their volume relations. We find that one litre, or volume, of chlorine, and one litre of hydrogen, when combined, produce two litres of hydrochloric acid gas. If we bring together one and a half litres, or volumes, of chlorine, and one litre of hydrogen, only one litre will combine with the hydrogen, while the half litre will remain intact. This will be equally true if one and a half litres of hydrogen be used, the half litre being left uncombined. This proves that chlorine and hydrogen combine in the proportion of equal measures. And it is likewise ascertained that the two volumes of gases, when united, form a compound gas without any condensation; hence the latter consists of two volumes. Again, when hydrogen and oxygen combine together to form water, we observe that it is invariably in the proportion of two volumes of the former to one volume of the latter. If we submit water to electrolysis, we get exactly two volumes, or measures, of hydrogen to one volume of oxygen. But, unlike hydrochloric acid, we find that these three volumes of gases (one of oxygen to two of hydrogen), upon uniting, condense to only two volumes.

We furthermore find, that, in ammonia (the third typical body), one volume of nitrogen will invariably combine with three volumes of hydrogen, and that these four volumes of gases will, in combining, condense to two volumes. Here we see that these three substances, hydrochloric acid, water, and ammonia, although formed respectively of two, three, and four volumes of gas, each, upon being combined, presents but two volumes of gas. Now the weights of these gases, in equal bulks, differ materially. While hydrogen weighs but one *crith*, or grain, the same bulk of chlorine weighs 35.5 criths, and nitrogen 14 criths. These figures being the atomic weights, or equivalents, of these gases, we find that their volume weights and atomic weights coincide. We find that chlorine not only combines with hydrogen, volume to volume, but that it is capable of displacing that gas in the same ratio in a great number of compounds. In fact we may regard free chlorine (Cl Cl) and hydrochloric acid (H Cl) as built upon the molecules of free hydrogen (H H), by the substitution of chlorine for one and two of its atoms, Cl H, Cl Cl.

It is no very easy matter to get at the volume relations of the gases; but, as the greater number of the elements are solid (only two being fluid), how are we to get at their combinations by volume? There are several of the solid elements, such as phosphorus, iodine, and sulphur, that unite with one, two, and three volumes of hydrogen, and with one. two, and three volumes of chlorine likewise. Thus we have the monochloride (Cl I), the dichloride (Cl_2 S), and the trichloride (P_3 N). These volumes are now regarded by chemists as atomic proportions, and it is found that their several specific heats are expressed by the number 6.3. If now we take that proportion of a metal which will correspond to the specific heat of one volume, or combining proportion, of the above gases, or that represented by 6.3, and regard it as the atomic proportion of the metal, we find that the chlorides of the metals, like the above-named metals, may be divided into monochlorides, dichlorides, and trichlorides. There are a few of these chlorides which may be vaporized, but they prove that two litres of their several vapors contain as many of chlorine as their respective formulæ would indicate, deduced from their specific heats. From two litres of the bichloride of mercury we can get two litres of chlorine, just as we can from the same volume of water; but from two litres of the chloride of bismuth (Cl_3 Bi), we can get three litres of chlorine, just as we can get three litres of chlorine from two litres of chloride phosphorus (Cl_3 P). In a word, from two volumes of these metallic chlorides we find the same volumes of chlorine we get from similarly constituted non-metallic chlorides.

In order that the simplicity which characterizes our modern system of *building up* the most complex substances, the following relations between the three typical substances I have reverted to must be attentively observed. I write them in the following form:

Chlorides.	Hydrates.	Amides.
$H\ Cl$	$H, H\ O$	$H, H_2\ N$
$K\ Cl$	$K, H\ O$	$K, H_2\ N$
$Zn\ Cl_2$	$Zn, H\ O_2$	$Zn, H_2\ N_2$
$P\ Cl_3$	$P, H\ O_3$	$P, H_2\ N_3$

If we act upon hydrochloric acid, water, and ammonia with a metal, we invariably obtain the same kind of reaction: one atom of the metal displaces one atom of hydrogen, and instead of chloride, oxide and nitride of hydrogen, we obtain the chloride, hydrate and oxide of the metal. This may therefore be regarded as the compounds of the metal with the radicals, chlorine (Cl), Eurhyzen* (H O), and amidogen (H_2 N). If the metal we use be potassium, caustic potash and potassamide may be regarded as the ammoniated form of chloride of potassium. This we find to be the case similarly with any chloride, either mineral or organic, simple or compound—that is, that they have a corresponding hydrate and amide, having the same relations that caustic potash and potassamide have to chloride of potassium. We regard chloride of potassium as formed upon the type of hydrochloric acid, where the hydrogen of the acid is displaced by potassium. In the same manner the hydrate of potash is formed upon the water type by the displacement of an atom of its hydrogen by potassium, and potassamide as being built upon the ammonia type by the substitution of potassium for an atom of hydrogen in ammonia. By this we learn that some of the most complicated products of tissue metamorphosis are only the ammoniated forms of very simple substances.

---

* So termed by the Germans.

Another substance upon which we may build is marsh gas, a compound of one atom of carbon combined with four atoms of hydrogen ($C H_4$). If we displace one atom of hydrogen in marsh gas by one atom of chlorine ($C H_3 Cl$), and then substitute for this chlorine atom one of peroxide of hydrogen ($H O$), we will thereby get wood-spirits. If we, however, replace the chlorine atom by amidogen ($N H_2$), we get methylamine. This latter substance is a constant product of the putrefaction of animal matter. If, instead of the above, we replace the two chlorine atoms in phosgene gas ($C O Cl_2$) by peroxide of hydrogen, we get carbonic acid; but if, instead of the peroxide of hydrogen, we replace them by amidogen, we obtain *urea*, which exists so abundantly in the urine, as a product of the metamorphosis of the nitrogenous portions of the body. Urea, therefore, regarded by physiologists as a very complex body, is viewed by the chemist as merely the ammoniated form of one of the simplest mineral acids.

Again, if we replace the three chlorine atoms in *cyanuric chloride* ($C_3 N_3 Cl_3$) by three atoms of peroxide of hydrogen, we obtain *cyanuric* or *pyro-uric acid;* and if we replace them by amidogen, we will obtain *melamine*, a product of the action of heat upon urea. Again, if we replace the chlorine in chloracetic acid ($C_2 H_3 Cl O_2$) by an atom of peroxide of hydrogen, we get *glycolic acid:* and if it be substituted by amidogen, we get *glycocine*, or sugar of gelatine. If, in *chlorethyl-sulphurous acid* ($C_2 H_5 Cl S O_3$), we replace the chlorine by peroxide of hydrogen, we get *Isethionic* acid, and if it be replaced by amidogen, we get *Taurine.* These three bodies are therefore the ethyl-sulphurous varieties of hydrochloric acid, water, and ammonia.* This generalization is of wide applicability. We find that we are thus enabled to associate together bodies of the greatest complexity, whereby we obtain substances which, in their easiness of comprehension, are in great contrast to our former appreciation of them. That is, by establishing between them the simple relations that exist between hydrochloric acid, water, and ammonia, we get at a key by which we can unlock the complexity of the most formidable organic compound, and reveal it to us in its utmost simplicity.

---

* Prof. Odling.

In order that you may comprehend the separate parts of a complex molecule, I will adduce the substances *salicin* and *populin.* The former, by submitting it to the proper conditions, will readily break up into less complex molecules, that is, into *saligenin* and *glucose.* *Populin*, treated in the same manner, will separate into saligenin, glucose, and benzoic acid. In the former we have the following reaction:

$$\begin{array}{ccccccc} \text{Salicin.} & & \text{Water.} & & \text{Saligenin.} & & \text{Glucose.} \\ C_{13}\,H_{16}\,O_7 & + & H_2\,O & = & C_7\,H_6\,O_2 & + & C_6\,H_{12}\,O_6 \end{array}$$

In the latter instance the populin breaks up as follows:

$$\begin{array}{ccccccccc} \text{Populin.} & & \text{Water.} & & \text{Saligenin.} & & \text{Glucose.} & & \text{Benzoic Acid.} \\ C_{20}\,H_{22}\,O_8 & + & 2\,H_2\,O & = & C_7\,H_8\,O_2 & + & C_6\,H_{12}\,O_6 & + & C_7\,H_6\,O_2 \end{array}$$

In both the above reactions it will be observed that a molecule of water in the first and two molecules in the second are concerned, in which these water molecules must be appropriated by the salicin and populin, ere they can undergo the splitting-up revealed by the equations. We therefore learn that salicin does not contain within it, already formed, the substances saligenin or glucose, and that neither does populin contain saligenin, glucose, and benzoic acid, but that, before either of these substances can be formed, water or its elements must be appropriated. We find that molecules of very complex composition may be built up from those less so by their constituent radicals absorbing, directly or indirectly, one or more molecules of aplone bodies, or those of less complexity. These radicals which, by their combination, produce these complex bodies by the absorption of water, are capable of separation from each other, and thereby forming separate though less complex compounds. Therefore we regard all polymerone, or complex substances, as being formed by the uniting of aplone, or substances of less complexity. Many of the complex organic substances have already been traced as belonging to certain typical groups and series, and there is no doubt but that we shall finally locate the most complex substances in their natural groups, as we have indicated in a former part of this lecture. Organic chemistry has therefore achieved grand results. The complicated structure of organic bodies the chemist has taken to pieces, not into its elementary atoms, but into molecules, or groups of bodies, which, possessing the combining properties of elementary atoms, may be analyzed or synthesized at pleasure. The very complex body *hippuric acid*, $C_9\ H_9\ N\ O_3$, contains 22 constituent atoms. It is known to consist of the residues, or compound radicals, of benzoic acid, of oxiacetic acid, or glycolic acid, and of ammonia. These radicals may be better comprehended by the following:

$$\begin{array}{r l}
C_7\ H_6\ O_2 & = \text{Benzoic Acid} \\
C_2\ H_4\ O_3 & = \text{Glycolic Acid,} \\
H_3\ N & = \text{Ammonia} \\
\hline
C_9\ H_{13}\ N\ O_5 & \\
H_4\ O_2 & = \text{Water,} \\
\hline
C_9\ H_9\ N\ O_3 & = \text{Hippuric Acid.}
\end{array}$$

By subtracting two molecules of water from ten atoms of the molecules of benzoic acid, glycolic acid, and ammonia, there results a substance having the composition of hippuric acid. If we act upon hippuric acid with different reagents, we have different compounds, depending upon which of the radicals the reagent may attack, or whether it may be one or more of the radicals. Each chemist therefore has assigned to hippuric acid a different formula. For instance, the glycolic acid is the most prone to combine with oxygen, and this radical is the most readily destroyed, if the agent be a substance yielding oxygen freely. In this case the glycolic acid would be removed, and the radicals of the benzoic acid and the ammonia will remain united, and forming *Benzamide*, thus:

$$C_7\ H_6\ O_2 + H_3\ N = C_7\ H_9\ N\ O_2 - H_2\ O = C_7\ H_7\ N\ O$$

by which you will perceive that, if one molecule of benzoic acid and one molecule of ammonia be conjoined, and one atom of water be subtracted from them, that one molecule of Benzamide will be the result.

If we treat ammonia with nitrous acid, its hydrogen will be converted into water, and its nitrogen will be evolved in its gaseous condition, together with the nitrogen of the acid, thus:—

$$H_3 N + H N O_2 = 2H_2 O + N_2$$

If, therefore, we treat hippuric acid with nitrous acid, its ammoniacal radical is destroyed in like manner by the acid, and the two residues are left in combination in the form of *benzoglycolic acid:*—

$$C_7 H_6 O_2 + C_2 H_4 O_3 - H_2 O = C_9 H_8 O_4$$

By examining this equation, as I have chalked it upon the blackboard, you will readily perceive the reaction, viz.: that one molecule of benzoic acid, added to one of glycolic acid, minus one of water, yields one of benzoglycolic acid ($C_9 H_8 O_4$). You are aware that hippuric acid is produced in large quantity in the animal body, and especially in that of the horse. Its transformations are therefore very instructive. We learn from its reactions that it contains the residues, or radicals, of three distinct molecules, which, by the absorption of water, are capable of separation. If either one of these radicals is destroyed, the other two combine, and we may get the benzoic and ammoniacal radicals as *benzamide*, or the other two, the benzoic and glycolic radicals, as *benzoglycolic acid*, or the radicals glycolic and ammoniacal, as sugar of gelatine.

I have given you an example of the manner in which residues combine, both as the constituents of a substance, without, we may say, leaving it, and, when they do leave it, to combine with some external body. This will, therefore, give you an idea of the manner in which many substances combine to form those of greater complexity. In this table I now bring before you, I have placed in the first and second columns those simple radicals which, by their combinations, with the elimination of water, will produce the bodies opposite them in the third column.

Radicals.		Diamerones.
Alcohol,	Sulphuric Acid	Isethionic
Wood-spirit,	Ammonia	Methylamine
Carbonic Acid,	do.	Urea
Glycolic Acid,	do.	Glycocine
Leucic Acid,	do.	Leucine
Palmitic Acid,	Cetal	Spermaceti
Palmitic,	Melyssal	Myricin
Palmitic Acid,	Glycerin	Palmitin
Stearic Acid,	do.	Stearin
Oleic Acid,	do.	Olein

In this table we see that isethionic acid may be formed by the union of alcohol and sulphuric acid, with the elimination of water. It therefore contains a residue of each of these substances. The next, methylamine, is a product of putrefaction of animal matter. It is formed, as you will perceive, by a combination of the residues of wood-spirit and ammonia; while urea, the analogue in man of hippuric acid in the horse, is composed of the residues of carbonic acid and ammonia, as in the former case, with the elimination of water, &c. Before I close, it will now be necessary to give you one other table, by which you can comprehend the rational composition of some still more complex animal bodies. As the previous table gives you the Diamerones, this one will give you the Polymerones.

Residues.		Polymerones.
Isethionic Acid,	Ammonia	Taurine
Glycolic Acid,	Methylamine	Sarcosine
Carbonic Acid,	Urea	Allophon
Oxalic Acid,	Urea	Paraban
Mesoxalic Acid,	Urea	Alloxon
Benzoic Acid,	Glycocine	Hippuric Acid
Cholic Acid,	Glycocine	Bile Acid, *a*
Cholic Acid,	Taurine	Bile Acid, *b*
Urea,	Sarcosine	Kreatine
Urea,	Methylamine	Methyluramine

In this table, as in the former one, the residues of isethionic acid and ammonia produce, with the elimination of water, *Taurine*, and this latter substance is the result of the residues of sulphuric acid and alcohol; while, again, *Sarcosine* is produced by the union of glycolic acid and methylamine, and the latter of the residues of wood-spirit and ammonia.

Thus, gentlemen, you see how very simple the building up of very complex substances from those of less complexity may be brought about. We have now entered into a new era in chemistry, and in my next lecture I shall introduce to your notice still more complex substances; but so simple is their formation by this building-up process that you will have no difficulty in comprehending their nature and relationship.

New York, February, 1867.

Case of Poisoning by Arsenic.*

BY PAUL W. ALLEN, M. D.,

Professor of Theory and Practice of Medicine in the Eclectic Medical College of the City of New York.

On the morning of January 10th, 1867, the day after the semi-annual meeting of the Massachusetts Eclectic Medical Society, I went, with Dr. Geddes, into the office of Dr. Joseph Jackson, 106 Court street, Boston. Dr. Geddes and myself had been in the office but a few moments, in waiting for Dr. Jackson to arrive, when a young gentleman and lady entered, and inquired for him. We assured the parties that Dr. Jackson would soon be in. The young gentleman seemed greatly in haste for a physician, and soon after stated that he could not wait, that the lady had taken arsenic—a large dose—and that he wished a physician immediately, and inquired where they could find one. The case was referred to me. "Have you taken arsenic?" "Yes, sir," replied the young lady before us, a person beautifully developed in form and feature, with dark hair and lustrous eyes, and looking all too lovely to have known sorrow, or committed such a sin as attempted suicide. Besides, that "Yes, sir," was spoken with such serenity, and with so bland a smile upon her countenance, that for a moment we almost doubted whether she were not attempting some deception. We instantly continued our inquiries. "How long since you took the arsenic?" "Half an hour, perhaps." "How much did you take?" "A large dose, sir; but I didn't measure it." "Did you know it was very poisonous, and liable to kill you?" "I supposed it would. I took a large dose. It will do no good to give me anything. I think it will kill me."

---

* Read before the Eclectic Medical Society of the City of New York.

We ordered fifteen grains of sulphate of zinc, immediately, in a little water, and quickly sent to Mr. Metcalf's for a bottle of the Hydratum Oxidum Ferri, and resumed our examination.

"Did you take breakfast before taking the arsenic, or did you take it on an empty stomach?" "I have not eaten anything for nearly two days." "Do you feel any sickness or distress at the stomach?" "No, sir; I feel a little faint and sinking. I think it will kill me. Doctor, it's no use to give me medicine." "Did you expect it would kill you?" "Yes, sir." "I pity you most sincerely. I will do whatever science can do for you. It is my duty to save you." "How can you save me? I took a great deal—a teaspoonful, at least," she said, with what seemed to be a triumphant smile. "What made you take it?" "I wanted to; I am tired of living." "I want to send for your friends; what street do they live in?" "I have no friends here; I am a stranger. I lodge at No. — —— street, and take my meals at the eating-saloons. My home is in ——, in the State of ——." By this time the emetic had acted promptly, and plenty of water was given to make the emesis more thorough, so as to dislodge all we could from the mucous membrane. There was no food, in fact nothing but mucus and the water, until we had repeated the emetic doses three times. Then a white powder, more than half a teaspoonful in quantity, was seen in the bottom of the pail into which she had vomited. She vomited immediately after each dose, and we followed each emesis with nearly a tablespoonful of the Ferri Hyd. Ox., in a little cold water. She still seemed perfectly composed, just as ready to die as to live; but her pulse became rapidly weaker, her hands became cold, the "damp cold sweat" was upon her fair face and neck and hands; she breathed in sighs of evident difficulty, and the case really seemed like the collapse of impending dissolution. But her mind was clear, weak as she was. Calmly she asked, "What is the ground of your hope to save me?" "We are getting all the poison out of your stomach that we can, by emetics; and we are trying to neutralize the rest with this iron, which is a chemical antidote. Where did you get the arsenic?" "At Mr. ——'s, the apothecary, in —— street." "Why did he let you have it?" "I have been there before to get arsenic to stop my toothache." "Did you take all he gave you?" "No, sir; here is a little," taking a small white folded paper, marked "Poison," from her pocket. We opened it, found some twenty grains of arsenic, sent it to the apothecary, and ascertained that he had given her "ten cents worth," unweighed. Lest the poison might not all be thrown off, we advised, along with Dr. Jackson, who had now arrived, that three more doses of the zinc should be administered. But the pallor and pulselessness of our patient began to make us somewhat fearful of the results of the case. From the young man, who had accompanied the lady from the manufactory in which they and many others were employed, we could get no clue as to the cause of this poisoning, but only that she had come into the factory, and taken the arsenic in a little water.

Life was so uncertain, and death seemed so near, that we now sought the reason for so terrible an act as suicide, in one whose amiable and queenly countenance indicated that she was intended for happiness herself, and to make happy all those around her. We said: "You may not live; be hopeful; we will do all we can. Have you a father and mother?" "No mother; she is dead, and no friends here." "Have you a father?" "Yes, sir." "Where does he live?" "In ——, State of ——." "Your father may forgive you—doubtless he will; but, as your father, he will want to know why you have done this. Have you any reason to give?" Waiting for an answer, we said again: "Have you been disappointed in your plans or affections?" "Some, in my affections; but I don't wish to speak much of it." We assured her that she was with those whose experience had made them acquainted with all the varied phases of life, who knew human hearts and personal histories of every shade, and that she could speak with generous confidence; and that if she had any private message to send to her father, in the possible event of death, we would most religiously fulfil our duty, and the world would know it not. But she had no message. We took her father's address and her own, and asked: "What shall I write to him?" "Tell father to come and get me," was her reply. We tried to convince her, in a few faithful words, of the sinful rashness of her deed, and to lead her mind to penitence, that she might hope for forgiveness, even in such an emergency. We were now compelled to leave, to meet an engagement, by the cars, in a distant town, and, after expressing our ardent hope that she might recover, and never again give way to such desperation of despondency, we consulted with Dr. Jackson, and left her future in his faithful care.

We confess that our minds frequently reverted to the case, now with hope and then with fear, for some days; but were much gratified to receive a note from Dr. Jackson, giving a record of the case, from which we state the following, essentially in his own words: "Soon after you left, the symptoms became still more marked and grave. A general coldness seemed to pervade the whole system. The extremities became very cold, clammy, and numb. She had vertigo and faintness. The burning at the stomach became quite acute, attended with great oppression in the region of the heart, and considerable dyspnœa. Pulsation at the wrist was almost extinct, and remained so for three hours. Painful retching became quite prominent, and also a general uneasiness, which was quite troublesome. The zinc, with the copious drinks of warm water, produced very profuse vomiting, dislodging another, and very considerable, portion of arsenic. Warm water and milk, thickened with flour, was then given quite freely; which relieved the burning at the stomach very much. The ferri oxidum hydratum was given in tablespoonful doses, mixed in cold water, every few minutes, for two hours; and then every half hour until six o'clock in the evening, when she was conveyed home in a carriage. At nine o'clock in the evening she was doing well, and the iron was continued, once an hour, through the night. On Friday, the 11th, she was much better, having passed a comparatively comfortable night; but she had much soreness in the stomach and bowels, and a general soreness all over the body.

Saturday, Jan. 12th.—She is still better than yesterday.

Sunday, 13th.—The patient is not so well as yesterday; feels very lame all over her system, and is in bed; complains of a terribly sinking sensation in the stomach and bowels, on assuming an upright position.

Monday, 14th.—Is much better to-day.

Tuesday, 15th.—Still improving, and talks of resuming her work in a day or two.

With a few suggestions, I leave this case with the reader.

First: It seems to us that zinc is the best remedy to produce emesis in most cases of poisoning. It is prompt and painless and powerful. Ipecac and lobelia would not probably have acted so promptly, and they might not have operated until fatal inflammation of the stomach had been produced. Besides, their nauseating effect would probably have relaxed the mucous membrane of the stomach, and rendered a degree of absorption more probable; and we say a degree, for arsenious acid is only very slightly soluble in either hot water, cold water, or the fluids of the stomach; but acts mostly as a violent local irritant, destroying the coats of the stomach by the inflammation induced. All medical men are aware that this is the action of arsenic in cases of acute poisoning from this agent, and if any are interested to know the exact appearances of the stomach, upon post mortem, we would refer them to the beautifully colored plates in the English edition of Hope's Pathological Anatomy.

Secondly: The symptoms of arsenical poisoning, especially the burning sensation and vomiting, usually come on within an hour; although in a few instances not under six or eight hours. Considering how entirely empty this patient's stomach was, it seems a little remarkable that these symptoms did not supervene under nearly two hours.

Thirdly: We see the practical usefulness of repeated emetics. Had these not been continued she might have died from the effects of that portion of the poison vomited in the second instance. There was probably enough left, after the first quantity was ejected, to have killed half a dozen persons, if it had not been either vomited, or entirely neutralized by the iron.

Fourthly: It may not be known to all our medical friends that the ferri ox. hyd. is put up in bottles, ready to be permanently kept, and instantly used when needed, and that single bottles of it can be procured at the drug houses. Mr. Proctor, of Philadelphia, prepares this article, and his preparation is reliable; and other manufactures may be equally so. Every physician should either have the iron, or know at what drug store it can instantly be obtained.

Lastly: Every person who has seen cases of poisoning by arsenic must have noticed its remarkable effect upon those nerves of organic life distributed to the stomach—producing extreme faintness and almost absolute prostration and collapse. The respiratory and circulating functions, as well as the nerve power of the entire system, are most powerfully affected by the direct and sympathetic action of arsenic, and other poisons, upon this system of nerves. In fact, the impression of medicines, as well as of poisons, upon the nerves of organic life, is one eminently worthy of the study of every physician; and the relative absorption of different medicines by the mucous membrane, and the conditions of that absorption, is a subject to be kept constantly in view by every person who would administer remedies intelligently and successfully.

No. 111 E. 82d street, New York.

A Singular Case of Strangulated Inguinal Hernia (Epiplocele, with Dropsy of the Omental Sac). Successful Operation.*

BY EDWIN FREEMAN, M. D.,

Professor of Anatomy in the Eclectic Medical College of the City of New York.

On January 14th, 1867, I was solicited by Dr. Miles, of this city, to operate on Mrs. Taylor, a lady, about thirty years of age, who was suffering from strangulated hernia, and was in great danger. I found the patient with a tumor in the right inguinal region, extending in the direction of and into the inguinal canal, about as large as a medium-sized orange, round external to the external ring, very tense and unyielding, and extremely sensitive to pressure, or even to touch. She said that it was much larger and firmer than on the evening before, and her suffering from it was very great, the inflammation evidently extending to the adjacent portion of the peritoneum. The hernia had been out about three weeks, with a considerable occasional pain; but she had neglected to have her physician see her to reduce it, as had usually been done. For the last five or six days it had been strangulated, and on the 11th of January, when he was called in, it could not be returned. She was first ruptured on the right side, five years ago, and on the left three years ago, by straining, while lifting, and so was ruptured on both sides. The doctor reduced it a number of times, and for a while she wore a truss. For the last six or seven months her right side only had given her any trouble.

Various efforts to reduce it by taxis had been made previous to my being called in, but without success. Tobacco poultices, alternated with bags of ice, applied to the tumor, were also unsuccessful. Indeed all measures previously used had been of no avail, except to aggravate the case. She had had two operations from the bowel since the strangulation, one from a dose of oil, another from a dose of pills, and there had not been at any time stercoraceous vomiting.

---

* Read before the Eclectic Medical Society of the City of New York

From this it was evident, to me, that the bowel was not included in the hernial tumor; that it was a protrusion of the omentum, with whatever other aggravating features there might be; and I expressed such to be my opinion. It was possible, however, that the operation might be a mere evacuation of the contents of the lower bowel. After consultation with Drs. Miles and Linn, his associates in practice, and Prof. Youart, who accompanied me, we concluded to try taxis again, persistently, until satisfied that that would not return it; then to try taxis with the hips elevated, so as to incline the body to an angle of at least forty-five degrees; and, lastly, to force a large injection into the bowel, and see what would be the result. Neither of the first two measures made any impression on the tumor; the last evacuated the bowels. It was then thought best to administer an anæsthetic, and try taxis, and, in the event of its not succeeding, to operate. A mixture of equal parts of chloroform and ether was then carefully administered by Dr. Miles. It was fully half an hour before she was completely under its influence, and at the latter part of the operation, the chloroform alone was used. She was obliged to inhale so much of the anæsthetic at first, that before the operation was half over she ceased to breathe, but was recovered by using actively and carefully Sir Marshall Hall's method of restoring suspended respiration, which in my hands has always proved successful when there is the same result from the use of an anæsthetic. When she was fully etherized, I made an incision, about three inches in length, over the neck of the sac, in the direction of the axis of the inguinal canal, and divided upon a director the several layers, until the sac was fully exposed. When the external ring was reached, I found the fibres of the intercolumnar fascia pressing so tightly upon the neck of the tumor as to be of itself a sufficient cause of strangulation. Those were severed by cutting upwards, guided by a director, which was with difficulty insinuated beneath. Still no impression could be made upon the tumor, and I then took up and divided several other thin laminæ, such as it is always possible to raise, where all the natural coverings and the connective tissue are so thickened and indurated by surrounding inflammation. After exploring, with my finger, to the internal ring, and finding no further stricture either there or in the canal, I concluded to open the sac, which appeared of a gray color, indurated, tense, firm, and thicker and tougher than the hernial sac usually appears. By pinching up with the forceps and cutting a small portion of the sac, a slight opening was made, through which a large quantity of water gushed out with a considerable force, and continued to run until at least a pint had escaped.

I immediately passed into it my director, and, cutting upward and forward upon it, I opened the sac sufficiently to explore it and examine its contents. There was no intestine in the sac, and it was continuous with a large sac in the abdominal cavity, through the inguinal rings, or the *canal of Nuck.* I passed my finger into the cavity, and explored in each direction. The boundary of the internal sac seemed to be nearly opposite the umbilicus above, beyond the median line to the left, and extending but a little to the right of the ring. There was no contained intestine, and none to be felt in any direction. It had contained water, which was evacuated on first opening the sac. The fluid, on escaping, had something of the appearance of light-colored urine, but not the urinous odor. The wall of the external sac appeared thick enough to be the wall of the bladder, but on passing the catheter into the bladder, and pressing towards the finger in the sac, the separate cavities were determined. From the appearance presented, and all the circumstances of the case, I concluded that, for the last three weeks, there had been hernia of the omentum; that the inflammation developed in that sac had resulted in effusion into it; that the pressure outward of the effusion had consolidated it with the proper hernial sac, and that its limits within the abdomen were produced by a glueing together of the walls of the sac, from the same or some previous inflammation,—for I have observed that, in a great majority of subjects examined where there has been no such protrusion, the walls of this sac are adhered together.

Before closing the wound it seemed best to adopt some measures by which the neck of the sac should be closed, and the sac itself permanently obliterated, so as to prevent any subsequent protrusion. I therefore passed a silk ligature around the neck of the sac, by means of a curved needle, and tied it sufficiently tight to close it up completely, but not sufficiently to produce mortification of the sac and its consequent sloughing. I thought that the handling of the sac would be sufficient to create a considerable inflammation, sufficient, both internally and externally, in connection with slight pressure, to produce obliteration, and in this I was not disappointed. I then closed the wound with interrupted sutures and adhesive straps, leaving the long ends of the ligature hanging out. Thus far we were successful, and the anæsthesia having passed off, the patient knew nothing of the operation. We agreed to apply a slight compress and a figure-of-eight bandage around the hips and thigh. A cloth was laid over the wound, extending to the left and right over the hypogastric and border of the right iliac region, wet with

℞	Tinc. Aconiti, Rad.	℥ i.
	Tinc. Arnicæ,	℥ iv.
	Aquæ,	℥ xvi. M.

the cloth to be kept constantly moist. An opium pill was administered, and she was directed to take of

℞	Tinc. Aconiti, Rad.	gtt. xx.
	Con. Tinc. Gelsemin.	ʒ i.
	Syr. Simplicis,	℥ ss.
	Aquæ Menth. Pip.	ʒ vij. M.

a teaspoonful every two or three hours. She was allowed wine, beef tea, and like fluid concentrated food. She was left under the care of Drs. Miles and Linn. January 19 : her strength had been supported very well. There was slight peritonitis, which was kept under by the gelseminum and aconite and the wet compress. I took out the sutures. January 22 : she has had a slight chill. The doctor is giving her

℞ Quiniæ Sulph. ʒ i.
Tinc. Ferri Mur. ʒ ij.
Aquæ dest. ℥ xij. M.

A dessert-spoonful three times a day.

She improved from this onward. The ligature was wound around a small cylinder of adhesive plaster, and tension kept upon it by turning it every day. It came out February 3d, passing entirely through the neck of the sac. The external wound then completely closed up. She is now able to sit up, and feels nearly as strong on that side as ever before the rupture, and probably will overcome all weakness, when the new adhesions and cicatrix shall have had time to take on the firmness of the other tissues. I know of no better agent for a local application for preventing peritonitis after such an operation than the aconite and arnica, sometimes combined with spts. camphoræ; and none for internal administration better than the gelseminum and aconite.

New York, No. 93 E. 17th St.

An Anencephalic Monster.

REPORTED BY S. C. CHURCH, M. D.

On the 12th inst. I was called professionally to see Mrs. ——, æt. 25; found her *enceinte* about six months gone, in fifth labor. She was suffering with acute pain in the left hypochondrium. I prescribed Pulv. opii et ipec. comp. grs. xv.; div. chart. No. 3. Sig. one every three hours. Also left comp. powd. Leptandrin grs. xv.; div. chart. No. 3. Sig. one every three hours. If these failed to move the bowels, ordered a dose of Ol. Ricini to be taken in the morning. Called next day and found pain had shifted to the loins (but without intermission since my last visit), with sensation of weight about the vulva, and with desire to urinate. Pain continued to grow worse, and extended over the abdomen, running toward the coccyx. Not supposing labor from continuation of pain, resumed treatment of 12th inst.

On the 14th inst., at two P. M., I was called. Found pain so acute, made an examination per vaginam; found os uteri dilated, membranes protruding, and, on account of constant pressure, thought it advisable to rupture membranes. After escape of liquor amnii, there was a cessation of pain for the period of twenty or thirty minutes, and regular labor-pains came on. My first intimation, upon second examination, was that a difficult labor was on hand, as I observed a face presentation; but by careful touch I learned that a deformed child was in utero. Hence I proceeded to deliver, which was soon accomplished, and a strange specimen of human nature was "sent into this breathing world before its time, scarce half made up," *corpus sine pectore.*

No more pains coming on, and failing to excite uterine contraction with remedies at hand, and there being excessive hemorrhage, I was compelled to remove placenta without pains, it being firmly adhered.

During fore part of gestation, the mother became alarmed at what she supposed to be a rat upon the bed. She made a desperate strike, and hit a favorite cat on the back of the neck, which sent it spinning to the floor. This frightened the mother, fearing she had killed it. The child she gave birth to has *no neck nor head.* The *face* is situated between the shoulders, looking heavenward. At the base and posterior of where neck should be, and where the cat was struck, is the cerebrum or encephalon (full size for fœtus), without a sign of cranium or covering save the pia mater, and hangs suspended between the scapulas, seemingly by a thread. The hemispheres and longitudinal fissure are too plainly visible to be doubted.

The fœtus is preserved in my museum, *in perpetuum, vel memoriam,* where it can be seen by any of the professional curious.

I have been a practising physician for thirty-three years, and have never before witnessed such a remarkable phenomenon as the one under consideration.

It is necessary to add that the mother, at the time of writing, is doing well.

PATOKA, Ind.

The First Commencement of the Eclectic Medical College of the City of New York.

The Commencement exercises at the close of the first session of this promising new institution were held at the Cooper Institute on Saturday evening, February 16, 1867. The capacious hall was crowded to overflowing with a brilliant and unusually intelligent and evidently interested auditory, hundreds of whom were ladies. The platform was occupied by the various members of the Board of Trustees, who were present on the occasion, the members of the Faculty, the reverend Clergy, and invited guests.

Prof. Robert S. Newton, President of the Faculty, introduced Rev. George W. Woodruff, of the M. E. Church, who inaugurated the exercises with prayer.

The Report of the Faculty, prepared by its Secretary, Prof. Paul W. Allen, was then read, and received with the closest attention by the immense audience.

The following is the Report of the present session, by the Secretary of the Faculty, Paul W. Allen, M. D.:

We are this evening assembled to hold the Commencement exercises of the first session of the "Eclectic Medical College of the City of New York." This institution was chartered by the Legislature of this State on the 22d of April, 1865. The trustees, after fully maturing their plans for a course of instruction, and having secured a Faculty of professors for the several departments of medical and surgical science, issued their announcement to the profession and the public for the course of lectures just now closed. A building was secured for the lectures, in a situation central in its position, and from which a direct and easy access could be had to the various hospitals and infirmaries of this metropolitan city. The building afforded excellent accommodations for a general lecture-room, for an anatomical and surgical amphitheatre, and for a library-room.

A Dispensary was provided to receive, for gratuitous treatment, all the afflicted who might desire to secure the superior advantages of Eclectic Medicine and Surgery. The examination of, and prescribing for, such patients were, in most cases, in the presence of the class, and have afforded an excellent opportunity for clinical lectures from the several professors. This gave the students an opportunity to compare the treatment adopted along with that allopathic medication seen at the different hospitals, and also to judge of the relative results or success of the different systems of medical practice. No American city—and perhaps no European—affords so ample opportunities for observation in hospitals, and for the study of ophthalmic medicine, and other specialties, as New York. Our students have fully availed themselves of these advantages, and have seen many diseases and witnessed many surgical operations which would not have been met with in years of ordinary practice.

From the middle of October last to the present time, a period of four months, our class of 40 members have devoted themselves constantly and thoroughly to the didactic lectures, to clinical lectures, and to the visitation of hospitals. Some of these students were in attendance upon lectures for the first term, some had attended one or more previous courses, and, in some instances, they had completed their studies and graduated more than ten years ago, and came to this College for the purpose of making themselves acquainted with the numerous discoveries and improvements which have since been made in eclectic medicine and surgery, since the days of their former pupilage, and also to enjoy those opportunities for the study of specialties so abundant in this city. Nor can we omit to mention that nearly all our students have been very faithful in their evening studies in practical anatomy, ample and excellent material for which has been supplied, while the Professor of Anatomy has given his entire evenings to the service of the class.

Our number of graduates is 11; of *ad eundem* graduates, 10; a small number, but one which, if we may speak in behalf of the Faculty, we may be permitted to say will, as we believe, do honor to their *Alma Mater*.

Our impression also is that our graduates and other students are deeply devoted to the peculiar doctrines of American Eclecticism; peculiar, in that we select our remedies from every school of practice and from all sources with impartiality; peculiar, in that we reject bloodletting and all other measures which are extremely depletive and exhausting; peculiar, in that we object to mercury, arsenic, and other mineral poisons; and peculiar, also, in that we are actively discovering and developing numerous remedies of inestimable value, from the fields and forests of our own country. The graduates of the "Eclectic Medical College of the City of New York" will, now and hereafter, go forth belonging to no medical party, except so far as they are compelled to be a party, in order that they may be true to themselves as the believers in, and exponents and defenders of, the party of universal and progressive medical science.

President Newton next announced the names of the graduating class, as follows:

NAMES OF THE GRADUATES.

Prince A. Morrow	Kentucky.
John Brioker	Iowa.
John Conoway	Iowa.
William R. Merwin	Missouri.
Edwin H. Millington	New York.
James A. Morris	New Jersey.
Charles W. Dolley	Michigan.
William R. Hayden	New York.
M. B. Hayden	New York.
J. B. Mix	New York.
H. H. Pratt	New York.

NAMES OF THE *ad eundem* GRADUATES.

Dennis E. Smith	New York.
John S. Prettyman	Delaware.
Herman Boskowitz	New York.
C. Edwin Miles	Massachusetts.
Joseph Jackson	Massachusetts.
B. J. Stowe	New York.
H. E. Firth	New York.
H. M. Sweet	New York.
David Willcocks	New York.
James A. Henshall	Wisconsin.

After which he introduced Dr. Alexander Wilder, editor of the "Evening Post," and Secretary of the Board of Trustees (the delegated representative of the venerable President of the Board, Hon. Wm. F. Havemeyer), who delivered the following brief and appropriate address to the class, during which he presented each member of the graduating class with the first Diplomas of the Eclectic Medical College of the city of New York.

DR. WILDER'S REMARKS.

"The vocation of the physician is one of the most necessary and important of the callings connected with our social life. When prostrated by disease, every one seeks his aid, feeling secure when that is obtained that the principal service has been rendered, and that his is now the responsibility. In these circumstances it is for the physician to meet his duties with fidelity and conscientiously, and to perform them fearlessly. Then, whatever may be the result, he has no cause to blame himself for any reprehensible neglect of his obligations to his patients.

"You have made choice, I trust a wise one, of this arduous and responsible vocation. I appeal to you to accept its varied duties with the strictest regard to what is due between you and those with whom you have to do. Maintain the dignity of your calling. You will be brought into terms of the closest confidence with patients and families. Cherish that confidence as sacredly and inviolably as you would maintain a principle of religion, suffering no levity or moment of passion to overcome your fidelity. It is your vocation to bring hope where there has been despondency, to minister life and health to those ready to perish, to mitigate the fierce anguish that racks and rends the human frame. Let that mission, for your own sake, for the sake of those with whom you have to do, for the sake of the profession which you have adopted, be performed with earnestness, intelligently, with zeal, and even with enthusiasm.

"You have adopted the doctrines and ethics of the Eclectic School of Medicine. The field occupied by the so-called regular practice covers the very ground which this school professes to hold. If it had consented, with a generous and intelligent liberality, to permit and acknowledge the meritorious service and actual scientific attainments of our friends, we would have had no more to ask. But a narrow conservatism,—and proscriptive conservatism is always narrow, retrogressive, and illiberal,—has prevented this. We could not be progressive in idea and practice without transcending the limits which had been assigned, saying nothing about secret cliques and illiberal regulations, by which a favored number have sought to monopolize the honors and emoluments to which all are alike privileged to aspire. There has been a landmark and a wall of partition established, and it now becomes the duty, and should be the ambition, of the Eclectic to promote by all honorable exertions the prosperity and scientific advancement of the branch which he has adopted.

" A pleasing duty now devolves upon me. The voice of your instructors has recommended you as worthy to be invested with the rank and honors of the physician. I therefore, in the name of the Faculty and of the Trustees of this College, by virtue of the authority granted by the laws of the State of New York, do confer upon each and severally, the degree of Doctor of Medicine, with the rights, privileges, and immunities pertaining to that dignity.

" With this assumption of your new duties, I entreat you to remember the old maxim, that every one is a debtor to his profession. As he derives from it his means of usefulness as well as of support, he should in return add to its scope of scientific research, to its dignity, to its importance. Let the profession be the better off because you have adopted it for your own. Maintain your professional and other relations with the strictest regard for the right; discharge your duties with zeal, faithfulness, and the strictest delicacy ; and magnify your vocation. In conclusion, I beg you to accept my best and most cordial wishes for your future—for your prosperity, your happiness, and your health."

President Newton followed Dr. Wilder in a brief, impressive, and eminently appropriate address, embodying numerous valuable practical suggestions, much sound advice, and some touching words of farewell to the graduates. His remarks were received with the most enthusiastic applause by all present.

The valedictory address was delivered by John Bricker, M. D., who was introduced by President Newton. This address was couched in simple but forcible language, and indicated rare ability, and a high character on the part of its too modest author, who has left us no trace of his neatly-written manuscript to copy or quote from, which we most certainly should do, had Dr. Bricker allowed us a chance at his address. The valedictory was received with gratifying tokens of satisfaction on the part of the class and all present. An address in behalf of the Board of Trustees was next made by the Corresponding Secretary, Mr. Henri L. Stuart.

MR. STUART'S ADDRESS.

"Ladies and gentlemen of the graduating class, and friends of the good cause which we here represent:—The remarks I shall make would more fittingly come from the lips of the venerable and distinguished President of the Board of Trustees, Hon. William F. Havemeyer; but he is unavoidably absent, as is our excellent Vice-President, the Rev. Dr. Strickland. The originating and founding of the Eclectic Medical College of the City of New York was the result of years of conviction and effort on the part of many persons; but the highest meed of praise is due to the widely-known and respected Treasurer of the Board of Trustees, Mr. William Moller. This gentleman, more than ten years since, with Mr. Albert Havemeyer, another member of the Board of Trustees, advanced the sum of $10,000 to establish a laboratory and manufactory of the various Eclectic remedies then discovered. In this enterprise they had the powerful co-operation and aid of Prof. Robert S. Newton, then editor of the Eclectic Medical Journal—a position he held for many years at Cincinnati, Ohio. This enterprise has grown into what is now known as "Keith's Concentrated Preparations," and a large fortune to Dr. Keith himself, due almost wholly to the outlay of money and professional influence on the part of Messrs. Moller, Havemeyer, Prof. Newton, and the members of the Eclectic medical profession in all parts of the country, who were induced to test and use these remedies mainly through the editorial endorsements, extending through a series of years, published in the Eclectic Medical Journal. Mr. Moller at that time went even farther than this. He offered to purchase or build a suitable college edifice, and to liberally endow it, if Prof. Newton would leave Cincinnati, and take charge of it. Dr. Newton was unable to make his home in New York at that time; but in 1863 he came here, and he found Mr. Moller still a staunch and fast friend; and the Eclectic Medical College, which has just closed its first session by the awarding of its first diplomas to its first graduating class in our presence here to-night, is a result of the combined action of Mr. William Moller, Dr. Robert S. Newton, Dr. Alexander Wilder, Dr. William W. Hadley, Messrs. Havemeyer, Oliver Charlick, and other enlightened and determined friends of progressive medicine, in and out of the Board of Trustees and of the profession. These men, animated by a solemn conviction that the time had fully come when a great central American Eclectic school of medicine could be founded, carried forward, and sustained to a permanent success in the city of New York, procured a most liberal charter from the State Legislature for such an institution. They were also fully convinced of the lamentable fact that, since the days of Paracelsus and the introduction of mercury and other poisonous mineral agents into use as medicines, there has been a gradual deterioration in the physical stamina of the people in all civilized countries where this barbarous practice has prevailed, until, at this moment, by statistics and general consent, there is not one person in ten,—man, woman, or child—in this country, possessing the inestimable blessing of a sound natural constitution, unsapped by the insidious, far-reaching, and potent foes of health, happiness, and life, some of the names of which I here enumerate: they are mercury, antimony, arsenic, lead; depletion, and the sanguinary-heroic system known as Allopathy, in which these horrible agents are the all-prevailing and dominant means used by practitioners of medicine, who claim to be "regular," to combat disease and sustain the vital forces of the human system, when attacked, while at the same time they denounce as quacks all who honestly and intelligently differ from them in opinion or practice.

"Deeply impressed with the truth of the foregoing considerations, the Board of Trustees, named in the charter, met, organized, and chose its officers, and appointed an executive and other committees, and prepared a code of by-laws. The Executive Committee, in accordance with the power delegated to it by the Board of Trustees, secured an admirably arranged and centrally located college edifice, collected apparatus and materials for the various departments, secured and appointed a competent and unusually efficient faculty, made provision for the first session, which has been successfully held and carried forward to the time when its first graduates are to go out honored and armed with the first diplomas of the new institution. A free public Dispensary has been established in connection with the College, and under the direction of its Faculty, which has afforded relief to a large number of sufferers, many of them given up as hopeless by other practitioners. This department will be permanently sustained and continued, whether the College is in session or not. A location has been selected for a large and commodious additional college building and house of trade, for the preparation in the most perfect form and the vending of all the approved remedial agents used by the American Eclectic school of medicine. In this edifice will be established a printing office, publication office, and book-store, for the publication and sale of the American Eclectic Medical Review, and all standard Eclectic medical works; also a professional library and reading-room, and a department of Pharmacy and Dentistry. It is the purpose of the Board of Trustees also to endow each of the various chairs constituting the Faculty, in a way that will enable each occupant of the same, by his individual efforts, to increase indefinitely his annual income from such endowment. Application will be made to the Common Council for a small sum to assist in supporting the free Dispensary; and, at the proper time, a similar application will be made to the State Legislature for some assistance in sustaining an Eclectic Medical Hospital, which forms a part of the chartered privileges granted to the Eclectic Medical College of the City of New York.

"It is the opinion of the Board of Trustees that the Legislature ought to divide the wards of existing hospitals supported at the expense of the public treasury, giving all schools of medicine a full and ample opportunity to test the comparative merits of the distinctive remedies and practice of each. They believe that the best interests of all classes of the community, as well as common justice and fairness, require this to be done. The Board would be distinctly understood as being in favor of giving woman an equal right and opportunity with man to achieve sound professional medical culture, under equal conditions, in institutions organized especially for their instruction and benefit, and where that is impracticable or impossible, suitable provision should be made, in connection with other institutions, to meet fairly and liberally any such demands made by and in behalf of woman. A strong reason with the Board for this conviction is found in the unquestionable fact, that the ailments of women and children furnish full seventy per cent. of all the practice and emolument making up the aggregate of fees paid to the practitioners of medicine under the most favorable conditions and practice, and this proportion is even much greater wherever the allopathic practice has exclusively prevailed.

"The Board have noticed the strong opposition which has prevailed in the Bellevue Hospital Medical College to granting woman equal right to medical culture and clinical observation in that institution, and have carefully weighed the reasons offered for and against the course there pursued, and are decidedly of the opinion that that course was unjustifiable, unwise, and wholly indefensible on any fair and manly grounds whatever. Give woman a fair and equal chance, with no prejudice or embarrassing restrictions, and if she fails, under these circumstances, to maintain her professional status, she will gradually and naturally turn to other fields of labor and occupation. 'Good nursing is often more important than medicine in the restoration of the diseased to health,' was once remarked to me by my late venerable friend, Dr. John W. Francis; 'but,' said he, 'this fact I did not sufficiently realize when I was a young practitioner.' Good nursing almost always devolves upon woman; and why should she not be allowed to test her powers as a physician, and to strive to obtain the higher rewards of that position?

"As a member of the Board of Trustees, I desire to make a brief statement bearing upon this question, and to illustrate the chronic and unmanly illiberality which we shall have to meet at every step from the arrogant tyranny of the self-constituted regular medical profession.

"Some years since I was introduced one evening to Dr. J. Marion Sims, the humane and gifted founder of the New York State Woman's Hospital, in this city. He was an allopathic physician and surgeon,—in poor health, supposed to be standing on the verge of the grave, in fact—who had made an important discovery in practical surgery of inestimable value to woman and society, and one, too, which has since given his name to all the world as a benefactor and man of genius. This man, when I first saw him, stood alone and almost friendless among the hundreds of his fellow-practitioners in medicine and surgery in this city. He could not even get a hearing in one of the allopathic medical schools of this city. And one well-known practitioner actually borrowed Dr. Sims's private case of instruments (the only ones then in existence), invented as a part of his discovery, to perform Dr. Sims's own operation in the City Hospital, while being guilty of the gross discourtesy of not inviting Dr. Sims to witness a first attempt to perform his great operation with his own instruments. I saw at once the merit of the discovery, and its bearing upon the interests and welfare of woman and humanity. A meeting was organized and held in the old Stuyvesant Institute, on the evening of May 18, 1854. The newspapers were called into requisition, the rank and file of the profession were appealed to, and more than 300 of them assembled on that rainy night, with but very few of the lucky and wealthy practitioners who make the rules and take the cream of practice in this city. Dr. Sims made his statements, setting forth the necessity of establishing a hospital for the treatment of diseases of women exclusively. Then and there commenced a systematic effort which was shared in by woman in the most effective way, and which has finally resulted in a series of buildings known as the New York State Woman's Hospital, the first of which, just completed, stands on the northwest corner of the block donated by the Common Council, bounded by Lexington and Fourth Avenues and Forty-ninth and Fiftieth Streets, in this city. Two others will soon be erected on the same block, in accordance with plans suggested to Dr. Sims by Florence Nightingale, Lady Franklin, and others eminent for philanthropy and humanity.

"In conclusion, I have to remark that, a few days since, I met Dr. Sims in this city, at the house of a mutual friend, who had been deeply interested in Dr. Sims's effort. There we saw the last annual report of the N. Y. State Woman's Hospital, and in it an anniversary address, delivered by an eminent Allopathic professor and surgeon, in which he spoke of the progressive character of American surgery, which had been recognized all over Europe—a fact mainly due to the genius and extraordinary skill of Dr. Sims, whose name was not even mentioned, in the address or report, in connection with the institution which he had originated and created. My advice to Eclectics, be they men or women, is to work as a unit and to battle aggressively against the professional despotism and illiberality such as I have just indicated, and the right will surely prevail.

"I now give place, and introduce one whose voice and pen are potential in encouraging and sustaining all intelligent and practical efforts for improving the condition of all classes of the people. Ladies and gentlemen, my friend, the Hon. Horace Greeley."

MR. GREELEY'S ADDRESS.

"I do not appear as the advocate of any particular school of medicine, nor the champion of any special medical system or theory. I look upon the establishment of an Eclectic Medical College in this city as a protest against abuses and as an evidence of reform. It is a palpable expression of a desire for free thought. Resistance to orthodoxy, I think, is doing good in the world. The school that stands up in opposition to the action of two thousand years is an argument of courage and determination based on purpose and conviction. Such a school might meet opposition, persecution, perhaps—certainly intolerance. The men who were stoned to death in their day, and the stones used afterwards to build their monuments, were the men who initiated radical changes, instituted great good. I would ask the new Eclectic school to consider the matter of medical etiquette. I see no reason why I should not call on my neighbors or friends of the allopathic, homœopathic, or eclectic schools to advise for my child when it is sick. Yet the intolerance of existing professional rules is such that I cannot do so without risking a wrathful refusal. I sincerely hope the new Eclectic school will not countenance any such middle-age folly, but that it will adopt a sensible, kindly, and manly rule of tolerance and professional good-fellowship in all such cases, no matter what school of practice may be followed. The spirit of Christian conciliation especially becomes one whose profession is to heal the sick and to prolong life. I think that the practitioners of different schools may consult together with much profit to each other. I hope that the graduates of the Eclectic Medical College of the city of New York will be animated with this kindly and charitable feeling toward all others practising their profession. I see no reason why forty or fifty rich or lucky physicians in New York should take the cream of practice here and all of the influential positions, and all of the prominence, under arbitrary rules made by themselves, which exclude the great body of their professional co-laborers from all opportunity of competing with them on equal terms. I see no reason why hundreds of good physicians should not announce themselves in a modest card in the newspapers, in the various specialties of medicine or surgery in which they may believe themselves to excel. This would be a sensible thing to do certainly in any other business, and why not in medicine? Yet the intolerance of the rule-makers of old schools of medicine is such that they would crush or ostracise any of their humble followers were they to do so, notwithstanding they themselves are advertised in the most effective way in connection with their official and public positions. I wish the new school of medicine you represent, gentlemen, abundant success, and trust that you will found and build it up on the sound principles of the most enlightened liberality, and lay broad and deep the foundations of a true medical science and system of practice."

PRESIDENT NEWTON'S CONCLUDING REMARKS.

At the conclusion of Mr. Greeley's address, the President of the Faculty, Prof. Newton, stated that the American Eclectic School had adopted a code of ethics which allowed consultations with any intelligent and properly accredited practitioner of any school of medicine, no matter how divergent their views or practice. He also said that the same code specially allowed the privilege of reasonable and proper advertising in the public journals.

The closing prayer and benediction were made in a very solemn and impressive manner by Rev. Charles F. Deems.

MATRICULANTS OF THE SESSION, 1866–7.

Allen, W. A.	New York.
Allen, C. S.	New York.
Archer, W.	New Jersey.
Archer, C. H.	New Jersey.
Bricker, J.	Iowa.
Boskowitz, H., M. D.	New York.
Bailey, S. B., M. D.	Connecticut.
Conoway, J., M. D.	Iowa.

Day, J	New York.
Donelson, J. E	New York.
Dolley, C. W	Michigan.
Firth, L. B	New York.
Firth, H. E., M. D	New York.
Fitch, J. H	New York.
Gregory, O. S., M. D	New York.
Hermance, H	New York.
Hayden, W. R	New York.
Hayden, M. B	New York.
Jones, L. A	New York.
Jacobson, A. E., M. D	New York.
Morrow, P. A	Kentucky.
Merwin, Wm. R	Missouri.
Millington, E. H	New York.
Morris, J. A., M. D	New Jersey.
MoElheny J	Virginia.
Munn, S. B	Connecticut.
Mix, J. B	New Jersey.
Platt, S. F	Maryland.
Pratt, H. H	New York.
Rude, M. E	New York.
Stalnaker, A. G	Virginia.
Sprague, S., M. D	Connecticut.
Sprague, C. S	Connecticut.
Smith, D. E., M. D	New York.
Stow, B. J., M. D	New York.
Sohell, C. C	New York.
Sweet, H. M., M. D	New York.
Stoddard, G. R	New York.
Willcocks, D., M.D	New York.
Wright, E. V	New Jersey.

PERISCOPE.

Portability and Communicability of Cholera.

The following cases, illustrating the portability and communicability of cholera, are communicated to the *Cincinnati Lancet and Observer* by Dr. W. H. Mussey :

"A Mr. Falrod died of Cholera in Cincinnati. His father took the body to Portsmouth, Ohio. During the exercises in the church, the father was taken sick with the cholera and died the same night. A daughter was then taken sick and died. The mother also died. Another daughter who had taken care of the family, but had returned to the house where she resided, was taken sick and died the next day. There was no cholera at that time in Portsmouth, and these four cases of death are traceable to the case from Cincinnati.

"A gentleman in Greenup County, Ky., had been in Louisville and returned home, having a diarrhœa. The night of his arrival, his wife was seized with the cholera and died the next day. She had not been from the farm for a long time, and had no communication with the outside world but by the return of her husband from a cholera region, having a *choleraic diarrhœa.* It is claimed by high authority, that persons having choleraic diarrhœa, can communicate the disease to others, though they may not die of the disease themselves.

"A child named Kettle, nine years old, died a week ago last Sunday night on Elm Street (in this city) west side, four doors north of the canal. At the funeral services on Monday, a playmate, the child of a Mr. Miller (residing two or three doors from Mr. Kettle), kissed the corpse, was taken sick, and died of cholera on Wednesday."

The Past and Present School of Paris.

There was a time when the French capital was looked upon by the medical profession throughout the world as the one and only seat of science, where alone the grand truths of our art could be discovered and taught. Students from every country went thither to complete their studies and to see the men whose names had been upon the lips of their teachers all through their early instructions at home as demigods in science, and whose opinions they had been taught to receive unchallenged as fixed principles. Even the hospitals which were associated with their teachings became famous, and Hôtel Dieu, La Pitié, La Charité, du Midi, St. Louis, were as familiar and classic names to the student of medicine everywhere as the Parthenon and Forum had been during school and college days. The distinguished men who composed the faculty were then at the height of their fame, and formed a body whose brilliant reputation was fully deserved and has never been equalled. Paris had then no rival as a school of medicine; she was the acknowledged front and centre of science. This was only a quarter of a century or less ago; but what position does she hold now? The earnest students of other countries no longer visit her exclusively, or even first or second, to complete their general studies, or to perfect themselves in any special branch of our art, nor is French now the universal or most important language of science, as it once was. The very names which then commanded such world-wide respect are now almost memories associated with the past, and are no more the representatives of the medicine of to-day.

What is the cause of this decadence? Why is it that the Wiener Schule holds at this moment the place then occupied by the Ecole de Médecine? The great masters of Paris have not died out and left their places to be filled by smaller men in Vienna, for, with one or two exceptions, the roll of French professors bears the same distinguished names that it did twenty-five years ago. Other causes have wrought the change. Gradually the philosophic German mind, so skeptical and irreverent as to accept no dogmas unchallenged, and so patient and industrious in following the suggestions of nature to their very source, began to make itself heard. This influence, at first felt in small things, and expressed in special directions, soon became an acknowledged power as the careful observations of devoted students —men who cared for nothing else in life than their studies, who had no higher ambition than their scientific reputation, who knew no other pleasure than was to be found in the laboratory or hospital, and who never aspired to become rich—became known. Such men as these were called together, as their names and works attracted attention, and formed the Vienna School, a body of special students, in no way men of brilliant genius, but keen observers and accomplished teachers. It is this devotion to study in special directions as the prime object of their lives—science before wealth—which has made German medicine what it is. It has given us Rokitansky, Virchow, and Förster in pathology; Wünderlich, Oppolzer, Skoda, and Frerichs, in medicine; Hyrtl in anatomy; Brücke and Ludwig in physiology; Jäeger, Graefe, Donders and Arlt, Hebra, Sigmund, Zeissl, and Scanzoni in special departments; Liebig, Lehmann, Scherer in analytical chemistry, and many other distinguished instructors who might be mentioned. It has made a knowledge of the German language a necessity to all who would know anything of the modern advances in science, and draws our schools to Vienna and Berlin as the great schools of medicine.

In the mean time, Paris has been living chiefly on the reputation of her past greatness, and the slight progress she has made has seemed complete stagnation by the side of the vast advance of her indefatigable Saxon neighbors. She is at last awaking to the fact that her present state is not equal to her former splendor, and is taking steps to recover her lost position in the scientific world. As will be seen by the changes announced in her faculty below, she is beginning her reformation in earnest. It is workers she wants, not great names, and, if she can secure the former, she may in time make herself again a leader in medicine.

EDITORIAL.

The Eclectic Medical College of the City of New York.

We have a sincere gratification, which we feel certain will be shared in by every friend of progressive medical science in all parts of the country, in announcing that the Eclectic Medical College of the City of New York, is a fixed fact. Its first session has been held, and brought to a successful close, having had a class of forty members, of which eleven were graduated. The American Eclectic

Medical Review makes in its current number—the "Tenth" of the first year of its life, a full report of the commencement exercises of the new institution. This report, which was published substantially in all of the great leading journals of New York, including the New York Daily and Weekly Tribune, will be read with more than usual interest, as it embodies the plans of the Beard of Trustees, and a brief, but most forcible and pertinent address from the distinguished and enlightened journalist and statesman, Horace Greeley. The new institution starts under the most favorable auspices, and will impart the most advanced and enlightened theory and practice of Eclectic Medical and Surgical science, to its successive classes. Its Faculty are among the most enlightened and enterprising, and their labors have been carried on in a spirit of good fellowship and unity, which could not be excelled.

American Eclecticism in medicine, is a natural outgrowth of the individualism and self-reliance which are such marked characteristics of the American people. It is the vigorous and enterprising child of our free institutions,—of our tendency to unfettered thought and action, and from its very nature, must be aggressive where old errors, musty formulas, and arbitrary rules originating in the old-world aristocracies and guilds are concerned. The mission of the Eclectic Medical College of the City of New York, will be to open its doors to all aspirants for sound medical culture, on eclectic and progressive principles on such liberal and enlightened terms, as shall accord with the dignity of American citizenship and manhood. No petty or contemptible prejudices of creed, or of caste will be allowed to mar or gnarl its ethical code. It will be a model professional institution of our land and time, and its influence upon the future well-being of medical science, and the profession of medicine and of society at large, will be far-reaching and beneficent beyond what has ever been achieved before, we heartily believe. Its successive Boards of Trustees and Faculties may pass away, but the Eclectic Medical College of the City of New York will from its broad and deeply laid foundations rise through coming years, as a column of rare proportions, until it shall stand crowned with the substantial honors of generations, centuries and eras of a vigorous intellectual life.

This may sound to some like rhapsody, or the day dream of an idler, but the tendencies of the age are progressive, and the wonderful successes which have attended great material enterprises in our day, afford ample *indicia* to the observant and persistent worker, to warrant the glowing language of the foregoing paragraph. The success of the Eclectic Medical College of the City of New York will give an added influence and power to other liberal schools of medicine in all parts of the country, and it will exercise a most invigorating and healthful influence to organize, unite, and consolidate the Eclectic Medical profession in all parts of the country, and the world.

Our State Medical Societies, and our great National Eclectic Medical Association will all be directly interested in its welfare and healthful development. State and National Legislatures will learn to recognize our influence, our singleness of purpose, our intelligence, our skill, our rights, and our power under the lead of this great national institution. The Amcrican Eclectic Medical Review will issue more than ten thousand copies of its present number, in connection with its announcement for its next session in October, of the present year, and this large number will be placed in the hands of many physicians of all schools. From present indications, we have reason to believe that we shall matriculate more than quadruple the number of students at the commencement of the next session, than were matriculated at the commencement of the session just closed.

Progress.

It is with feelings of no ordinary nature, that we note the progress of Eclecticism. The several thousand physicians who have received their medical education in the Eclectic Medical Colleges are by no means idle. With an indefatigability of purpose, which we believe belongs exclusively to the Eclectic profession, this body of noble men, with the cynosure of Right and Truth before them, are constantly progressing onward, and not only adding greatly to our materia medica, but are adding daily other physicians, their compeers, to the great Eclectic body. There was a day, when the Allopathic profession was regarded by the Eclectic as its most formidable and inveterate foe and antagonist. But how the scene has changed! It is from the Allopathic ranks that we are now receiving many of our most valued and learned co-laborers. As it is the most independent and thinking physician who is most prone to break through the fetters of bigotry, and by the force of observation and reasoning, to traverse the wide fields lying beyond the Allopathic fold, so must it be those very persons who come to us from the narrow field of Allopathy. It only requires that thought, free and untrammelled, shall for a time exercise its inalienable right, that the old fogy of to-day may be the free and unfettered Eclectic of to-morrow.

The Allopathic physician of Europe resembles the Eclectic of the United States much more closely, in his practice, than the same class of practitioners of this country. It is seldom that the more enlightened European physicians resort to the lancet, or to the poisonous mineral drugs so profusely and universally used by the allopathic here. This we know by an intercourse of several years with some of the most illustrious physicians of Europe. They are repudiating these destroyers of human life, and resorting to the more simple means of the American Eclectics. At this time almost every steamer conveys large quantities of Eclectic remedies to Europe. As the human mind continues to progress, so will Allopathy approach Eclecticism, until finally the entire profession, the world over, will have adopted that enlightened method of practice which has been so auspiciously begun by the Eclectics of the present day.

When we look over the statistics of the Eclectic medical profession throughout the United States and the Canadas, we are as much surprised as we are gratified at the great result which the last decade has brought forth. There is scarcely a county in the States or Canadas, but that contains its Eclectic physician, who is universally a busy, active, intelligent gentleman, devoted to his profession, laboring day and night to perfect himself in the intricate science of curing disease. With such men as these for our vanguard, the great army of Eclecticism will press onward to continued victory.

Eclecticism.

When we think how important the mission of the physician is—how much the community depends upon the skill and judgment of those who ought to be the dispensers of health-inducing remedies—how dear is every man's life—it would seem that common benevolence, Christian charity, and individual kindness, would induce those who have assumed the responsibilities of the physician to pause, lay aside their prejudices, and examine the claims of Eclecticism; which asks only a trial, fair and judicious; and if it cannot stand the tests of examination and application, let it give place to some other more correct system. Here is a system of practice which is founded on reason and the highest acquirements of other systems—a system which carefully examines every new principle, tests every new remedy, adopts the demonstrative facts and principles of all systems, and presents much to the physician unknown to the other schools—which, in short, courts investigation—which demonstrates its correctness by its successful results—and yet many practitioners turn a deaf ear to its merits. It would seem that many physicians do not want to know the *best* means of curing disease But young men, who have reputations to gain, are beginning to learn its worth, and we have an abiding faith that all the sects must soon give way to the onward march of this republican and rational system of medicine

---

"Irregulars" versus "Regulars."

In his opening address to the Medical Society (Allopathic) of the State of New York, Dr. James C. Hutchinson took occasion to say, that "an act virtually empowering the Society to regulate the conditions of membership, and to exercise proper discipline in needed cases, &c., had been passed by the legislature, but, in a spirit of mistaken justice, the same privileges had likewise been extended to the irregular organizations." The Pharisees, when they prayed, commended their own righteousness; also, there are some nations whom we consider comparatively ignorant, but who, to their own vision, are at the acme of civilization, while all the rest of the world are barbarians; so with Dr. Hutchinson and his clique. Although there are organizations conforming to all the requirements of the law, in reference to membership and discipline, he is pleased to style them "*irregular*." Their members must, by law, be graduates of some regularly chartered medical college, and so must those of the society to which he belongs. Where, then, is the difference? Is the teaching different in the colleges in the fundamental branches of medicine? Anatomy is the same in all the colleges, and is taught as thoroughly; physiology is the same; pathology is the same; materia medica, surgery, the practice of medicine and obstetrics are the same, except as to the latest improvements and discoveries, which are generally with those whom the Doctor styles irregulars. If the teaching, then, be not fundamentally different, except as before mentioned, and equally thorough, is it in the preliminary qualifications that they claim the right to be styled regular? The law, however, prescribes what those shall be, and all are presumed to abide by its demands. The Doctor, although he recommends a "systematic course of reading and examination," admits that "office instruction is often a mere sham;" and one would think that college instruction is also, from the kind of graduates turned out of some of the so-called *regular* medical colleges. As a general rule, the office instruction of those *irregular* practitioners is not "mere sham," for there is business enough done in them to give to the student, in connection with his reading, a thorough training in the elementary parts of medical science. The difference is, the reform schools teach all the improvements made in the practice of medicine, while the others have been asleep; and in addition, they teach and allow a manly independence of thought and action, to prescribe according to the best dictates of their judgment; nor do they seek to bind them with oaths, or trammel them with obsolete rules or formulæ. How contemptible, in view of this, is the policy recommended by the committee on suggestions to the president's inaugural address!—and reform physicians will please notice this—"that in the issue of college circulars it be distinctly stated that certificates of study from irregular practitioners will be disallowed, and that they will confer no degree upon any one avowing his intentions to practise medicine in accordance with any exclusive system." They themselves are the very essence of exclusiveness, and any departure from *their* way of thinking is visited with all the penalties that they have the power to inflict. What must be the self-sufficiency of the man who can say that "the opinions entertained, even by the best educated, are mere vulgar errors"! But he is compelled to admit that in this country, where the largest liberty prevails, the people have had their wits sharpened to a quick sense of their rights; and, let me add, that they are seeking and demanding their rights. This medical tyranny of a few over the many, transplanted from the aristocratic systems of the old world, and more intolerant than the old ecclesiastic *regime* of the fifteenth century, is not indigenous to this country, and is foreign to the spirit of freedom in which we were born. We and all liberal minds protest against all such efforts to bind men's minds, and restrain them from the most free and untrammelled investigation into all truth. We reformers, under whatever name we may be known, are the Protestants in medicine, and, with flags nailed to the mast, wage unceasing war against all such efforts to trample out the spirit of freedom in our noble profession.

Eclectic Medical Society of the State of New York.

THE meeting which is to be held at Saratoga Springs in June next will be one of the most important ever held. There are many subjects to be brought before the meeting of the greatest importance to the cause of Eclecticism. It is hoped that every committee will be fully prepared to report upon their special subjects. The following is a list of the various committees appointed to report at the annual meeting in June, 1867 :

Annual Address, Prof. EDWIN FREEMAN, M. D.; Essayists, H. E. FIRTH, M. D., H. C. GAZLAY, M. D. ; Surgery, Prof. ROBERT S. NEWTON, M. D., Prof. EDWIN FREEMAN, M. D.; Obstetrics, HORATIO E. FIRTH, M. D., ORIN DAVIS, M. D.; Materia Medica, Prof. WM. W. HADLEY, M. D., ANDREW W. RUSSELL, M. D. ; Theory and Practice, D. E. SMITH, M. D., L. STANTON, M. D.; Chemistry and Pharmacy, Prof. J. MILTON SANDERS, M. D., THOMAS L. HARRIS, M. D. ; Eclectic Medical Literature, HENRY S. FIRTH, M. D., A. B. WESCOTT, M. D. ; National Eclectic Medical Association, JAMES T. BURDICK, M. D., B. J. STOW, M. D. ; United States Eclectic Pharmacopœia, Prof. PAUL W. ALLEN, M. D., Prof. WM. W. HADLEY, M. D., Prof. EDWIN FREEMAN, M. D., ORIN DAVIS, M. D., CALVIN S. TOTMAN, M. D.; Committee of Arrangements for next Annual Meeting, R. HAMILTON, M. D., CHARLES. K. BROWER, M. D., HARMAN PEASE, M. D.

The New York Academy of Medicine an Advertising Bureau.

THIS agency advertises what is termed by the Medical and Surgical Reporter, a novel "Cholera Preventive." We quote *verbatim et literatim et punctuatim* from its issue of Feb. 23d, the substance of a report from a special committee of this *as*-tute body to whom the novel subject was referred.

"Your Committee believe it to be the duty of the Academy of Medicine to encourage by all means in its power the study and improvement of methods for the *prevention of disease;* while the *treatment* of all diseases, in each individual case, must be left to the judgment and skill of the attending physician.

"That your Committee have examined carefully the "Deodorizing Chamber-Pot," and recommend its use as a most effective means of preventing the spread of cholera and other zymotic diseases.

"That the invention consists of a hollow compartment in the lid or cover, for the reception of a suitable deodorizing compound, with an opening in the top for the emission of the neutralizing gas, thus bringing the antidote in immediate contact with the poison.

"That the invention is patented, and that the formula of an excellent disinfecting compound will accompany each vessel.

"That both the vessel and the compound are recommended to be used in all sleeping apartments and other places where chamber-pots are used."

This report was unanimously adopted by the Academy.

The Journal in question endorses this action by a most fulsome, adulatory editorial puffing of the Academy of Medicine and its novel bantling.

After reading the foregoing report of a select committee of so exclusive, notorious and self laudating a *collection* of "regular" Doctors—who have associated themselves under the style of the New York Academy of Medicine,—we have to stop to take breath. This extraordinary attempt to win fame and di*stink*sion not exactly at the cannon's mouth but through the muzzle of another style of great gun, to wit, a special Patent "Chamber Pot Committee" is beyond all praise and justly entitles each member of the Academy, its Committee and their editorial chronicler to wear one of the newly invented devices on their heads. This wonderful "Cholera Preventive" might be made to serve as a medium to perpetuate the sage countenances of the exclusive and erudite pundits of the Academy as an artistic border on its *deodorizing* cover—while the more select physiognomies of the members of the special committee might take a more exclusive and confidential place in the commiteeroom below, and the brilliant editor of the Medical and Surgical Reporter himself ought to have the place of honor to fill the bill indicated by the formula which the committee assert will be supplied with each "Deodorizing Chamber Pot."

At the last meeting of the Academy, the members resolved themselves into a committee of the *whole*, on the report of their special committee, and made a general and special examination of this wonderful odorous utensil. Each member sat upon it, and thoroughly tested its deodorizing qualities, whereupon having satisfied themselves they decided to *puff the article*, even if in so doing they perpetrated an act which is in *exact* opposition to their code of ethics, and which exhibits them to the world as ignoramuses and to a suspicion of something *more* unprofessional.

The committee in making its report announced that "a prescription for an excellent disinfecting compound will accompany each vessel," but they did not state how often that *prescription* would have to be renewed—nor what benefit was to accrue to the Academy of Medicine, its Drug dealers, and editorial laudator from the immense business of furnishing the human race with the new patent chamber-pot and its accompanying *formula* so ardently commended.

Now, we do not take the ground that physicians should not advertise, for we believe that any physician who has the brains, and the independence to study, any special branch of medicine, and who has truly made himself more competent to practise it than the physician who has not devoted his entire attention to it—is justified in informing the public that he is ready to ply his calling among them.

We do not object to the Members of the Academy of Medicine for advertising for themselves, or others; but we do object to their doing so while pretending to be governed by a code of ethics which expressly forbids all advertising on the part of the members of the school to which they belong. If all advertising doctors are humbugs, the Members of the New York Academy of Medicine hold the first place and should receive historic crystallization at the hand of Barnum when he writes his next book on that delectable species.

"Sugar-Coated" Preparations.

Every practitioner, in dispensing medicines, must have observed the decided preference manifested on the part of his patients for medicines which are put up in a palatable form, and their aversion to those which are nauseating and unpleasant. It has now become quite popular to use sugar-coated preparations, and the positive demand made for them by the public, has compelled physicians to discontinue, almost entirely, their former mode of preparing and administering similar medicines. The efforts of manufacturing chemists and druggists, to prepare medicines in an elegant and agreeable form, and at the same time to retain all their medicinal virtues, has been crowned with success. Among those who have made a speciality of preparing sugar coated pills and granules, none have achieved a more deservedly high reputation than the house of Wm. Warner & Co., Philadelphia. We have used many of their preparations, have tested their curative properties, and have found them safe, efficient and reliable. Their list embraces the *officinal*, and many other recipes of acknowledged excellence.

Donations to the Eclectic Medical Dispensary.

We acknowledge with pleasure the receipt of very generous donations to our Dispensary, from the following gentlemen. Messrs. B. Keith & Co., No. 41 Liberty-st.; Messrs Hornby & Pemberton, No. 41 Dey-st.; Messrs. P. B. Knapp, No. 362 Hudson-st.; Dr. Wm. R. Hayden, No. 42 Irving Place, and Mr. Renatus Bachmann, No. 101 and 103 Beekman-st. Messrs. B. Keith & Co. deserve especial thanks for their liberality.

List of Attending and Consulting Physicians and Surgeons of the Eclectic Medical Dispensary of the City of New York.

Days.	Time.	Attending Physician or Surgeon	Consulting Physician or Surgeon.
Mondays	2 P. M.	E. H. Millington, M.D.	Paul W. Allen, M.D.
Tuesdays	2 P. M.	O. S. Gregory, M.D.	Wm. W. Hadley, M.D.
Wednesdays	2 P. M.	W. R. Merwin, M.D.	Edwin Freeman, M.D.
Thursdays	2 P. M.	W. R. Hayden, M. D.	Paul W. Allen, M.D.
Fridays	2 P. M.	P. A. Morrow, M.D.	Robt. S. Newton, M.D.
Saturdays	2 P. M.	E. F. Garvin, M.D.	Edwin Freeman, M.D.

NEWS AND MISCELLANY.

Sulphite of Soda in Erysipelas.

Dr. A. R. Edson, of Greenwich, New York, writes: "Having had considerable experience in treating erysipelas, for the past twelve years, consequently have used all of the most approved remedies for its treatment, I now give the Sulphite of Soda the *decided preference.* A few weeks since I was called to prescribe for a man, who was laboring under a severe attack of erysipelas, which was confined to the head and neck; the parts enormously swollen, and covered with large vesicles filled with a transparent watery fluid, the pulse hard and very rapid, tongue loaded with a brownish colored coat; there was at times partial delirium. I found that the bowels had not moved for several days. Ordered cathartic composed of podophyllum and leptandrin. After the operation of physic, gave sulphite of soda in *eight-grain doses*, every two hours, together with the local application of a weak solution of the iodide of potassium over the affected parts. At the expiration of twenty-four hours, discontinued external treatment. Still continued the sulphite, at intervals of three hours; at the expiration of *six days*, my patient was entirely well.

"I have treated several other cases of the milder form of erysipelas, with the *sulphite of soda* alone, with the happiest results. I have used in this disease the muriate tinct. of iron and iodide of potassium, internally administered, which is so highly recommended, but consider the above salt far superior to either, as it rarely if ever disagrees with the stomach."

AMERICAN

ECLECTIC MEDICAL REVIEW;

A Monthly Record of Medicine

AND

THE COLLATERAL SCIENCES.

Vol. II. APRIL, 1867. No. 11.

ORIGINAL COMMUNICATIONS.

Carbon.

BEING THE SUBSTANCE OF A LECTURE DELIVERED BEFORE THE CLASS OF THE ECLECTIC MEDICAL COLLEGE OF NEW YORK.

BY PROF. J. MILTON SANDERS, M. D., LL. D.

> " Now to the instructions of a humble friend,
> Who would himself be better taught, attend.
> Though blind your guide, some precepts yet unknown
> We may disclose, which you may make your own."
> After Horace.
>
> Yet sage instructions to refine the soul
> And raise the genius, wondrous aid impart,
> Conveying inward, as they purely roll,
> Strength to the mind and vigor to the heart.
> When morals fail, the stains of vice disgrace
> The fairest honors of the noblest race.
> Ibid.

In those primeval times when the earth was trodden by the formidable Deinotherium, the air inhabited by the gigantic Pterodactyl, and the waters were lashed into foam by the Icthyosaurus, the element Carbon existed in its available condition in the greatest abundance. The vast masses of compact carbonaceous matter underlying the rich soil of the greater number of our States, was then disengaged in the form of carbonic anhydride, and constituted a considerable ingredient of the atmosphere. Only a brief time previously (cosmogonically speaking), the primordial elements were dissociated, and chaos reigned supreme. But the fiat had gone forth, and chemical affinity had exerted its mighty energies. The various elemental bodies lost their repellent forces, and, suddenly gifted with those of adverse natures, arranged themselves, according to law, into combinations of symmetry, order, and beauty. In the great air-ocean surrounding this earth, there had collected many substances which are aeriform at common temperatures, while others, in accordance with their atomic attractions, had united, forming the waters of the ocean and the solid crust of the globe. In this vast aerial ocean which enveloped the earth, the great masses of carbonaceous matter, now stratified underneath our soils as bituminous and anthracite coals, then existed in the gaseous form. Instead of composing, as at the present age, only the two-thousandth of the atmosphere's weight, it then constituted a very large percentage—so much so, that had man, as he is at present constituted, been thrown into such an atmosphere, the great amount of carbon existing therein would, no doubt, have speedily terminated his existence.

A flora a thousand times more luxuriant than any at present then flourished, both upon the land and within the waters. With an avidity to which our present foliage cannot be compared, they appropriated this carbonic anhydride, so richly abounding about them, and their growth progressed correspondingly.

Feeding upon this gigantic flora were creatures no less formidable, and whose petrified excreta at the present day create astonishment and speculation among philosophers. Not organized like man were these gigantic fauna, for they breathed this mephitic carbonic anhydride freely, and its noxious, foul, and pestilential nature fell upon their lungs as harmless as the fragrant air of the tropics upon those of man.

In those primeval times, doubtless, the rays of the sun possessed a greater share of actinic power than they do at the present. This energy fell upon the gigantic foliage, and, penetrating into their cells, infused therein a power of decomposition and synthesis, fully required for the task to be performed in those early days. This carbonic anhydride, noxious and poisonous to animals of the present day, and especially to man, was now required in another and less hurtful condition. Storing within it vast quantities of the force of the fierce sun, the carbonic anhydride became organized, and formed a large portion of the cells and fibres of a luxuriant vegetation. Finally it became gradually abstracted from the atmosphere, while an equal volume of pure vital oxygen was given out by this foliage in its place. Thus the vitiated air became purified, while the wise ordinance of Providence was fulfilled in regard to the innumerable races yet to be created, in this store of vast force in the form of Light and Heat, to be appropriated by them in the furtherance of their progressive civilization.

In time this vast accumulation of vegetable matter underwent slow decay, or eremacausis, probably under water. The hydrogen and oxygen which formed a portion of its composition gradually escaped—the former only partially in some cases, and entirely in others. The masses of foliage and twigs became compacted, perhaps by some kind of pressure, and in ages those strata were formed termed *coal.* Thus two paramount objects were gained by the same effort. The poisonous carbonic anhydride was withdrawn from the atmosphere and formed portions of vegetable organisms, while there was fixed a gigantic force which, lying dormant for ages, was at hand when required to supply heat and light, or their co-ordinate force or momentum, to any amount required. That mighty strength exerted by the steam-engines of the present day is the very force, therefore, which was identical with the rays of the early sun, and fixed by the gigantic flora of those ages. Lying dormant for millions of years, it issues from the débris of that ancient vegetation, and, fraught with life and activity, imparts irresistibility to the steam-engine. Like a sleeping giant, it lies supinely in its bed until awakened by the hand of man, when it arouses, and exerts the identical force derived from the fiery sun millions of years ago. It is in the carbon that this immense force lies stored, at least in some species of coal; while in others hydrogen, along with carbon, is its magazine. Some specimens of this coal present themselves as almost pure carbon, while other specimens contain a large quantity of hydrogen. The former compose anthracite coal, and the latter bituminous. Carbon is, therefore, one of the most abundant of the elements, existing both in the free state and in a great variety of combinations.

In the diamond we have it in the pure state as a crystal In graphite and plumbago we have it nearly pure, and less so in anthracite coal. In the form of carbonic anhydride, combined with calcium and other bodies, we find it in large quantities, while all organized bodies contain it as an essential constituent. In this paper we shall first recognize carbon in its pure crystallized condition as the diamond. This valuable gem is found in alluvial soils, and is produced by the disintegration of ancient rocks. The principal localities where this gem is found are in India, Borneo, Brazil, and the Urals. The diamond crystallizes in forms belonging to the regular system, that is the octohedron. It also may be found in the cube, the rhomboïdal dodecahedron; also the triakis-octohedron, a figure of twenty-four faces, formed by the superposition of a low triangular pyramid on each face of the octohedron. Also the hexakis-octohedron, a forty-eight sided figure formed in like manner by a six-faced acumination of the octohedron. The diamond is the hardest substance known, and has a specific gravity of about 3.50. Although we would suppose that the sharpest angle would be required to cut glass, still such is not the case. It requires that the edges shall be curved, like those of a double convex lens, ere it will cleave the glass suitable for breaking with the line. In this form it enters the glass like a wedge, while the straight edges only scratch the glass. The purest diamonds are colorless and transparent; but there are diamonds of various colors, such as yellow, red, purple, green, brown, and black, etc. The diamond possesses a very high refractive and dispersive power, and hence that peculiar brilliancy for which it is so highly prized. But this lustre is heightened by cutting the gem in facets capable of reflecting and dispersing the light in various directions. As it is the hardest body in nature, the diamond can only be cut and polished with its own dust. It is only then, with patience and toil, that it can be abraded; but after the proper angles of the facets shall have been obtained, and the proper polish has been put upon them, it is by far the most brilliant object in existence. The diamond is a poor conductor of electricity, and like all other forms of carbon, it neither melts nor volatilizes by the heat of our most powerful furnaces. If it be placed between the poles of a very powerful voltaic battery, or under the oxy-hydrogen blow-pipe, it will take fire and burn vividly, the product of the combustion being pure carbonic anhydride. Thus is the sagacious conjecture of Newton verified, that this gem was combustible, which that philosopher predicated from its high refractive properties.

Graphite is another form of carbon. It is known in one form as an amorphous mass, generally known as "black lead," in consequence of its leaving a streak upon paper resembling that made with a piece of lead. Another form is found crystallized, opaque, and very hard. Another form is deposited in the interior of gas retorts. It is very hard, has a metallic lustre, and conducts heat and electricity almost as perfectly as a metal. There is no element which presents more curious properties than carbon. It belongs to the tetrads; that is, it takes the place of four atoms of hydrogen in a compound; for instance in marsh gas, $C_4 H_4$. The allotropic forms which carbon assumes are deeply instructive, and lead us to suppose that other elements may likewise possess its singular properties. Who would suppose that diamond, charcoal, lamp-black, black-lead, and hard graphite, were the same substance? What can be more contrasting than lamp-black and the diamond? Still they are both carbon, the only difference being, that one is crystallized and the other is amorphous. Carbon likewise presents the singular property, chameleon-like, of entirely changing its nature. In one form it has an equivalent of 6. In another that of 33, and nothing can be more dissimilar than the compounds of these two forms of carbon. They certainly differ full as much as those of any other two elements.

But the great importance of carbon is manifest in organized compounds. It exists in them all, and certainly forms their most important constituents. Without carbon the compounds would be neither animal nor vegetable, for this element is the foundation upon which their organism is built. Ere a vegetable could exist upon the earth, carbon had first to be available. The carbonic anhydride existing in the air, was the available carbon. From this, vegetation first derived its carbon, as we have already alluded to. The history of carbon, therefore, is the history of all animal and vegetable organisms, and that of all their products. It involves thousands, ay tens of thousands, of complex combinations—the most abstruse study that the human intellect can engage in, and furnishing food for the profoundest study and investigation. He who could remember the vast list of the carbon combinations, must indeed be possessed of an intellect so gigantic, that its creation would be an era in the history of man. No present intellect could do it, for millions of recondite formulæ would necessarily have to be remembered, only a small portion of which are yet known. And every day introduces new ones, for thousands of the most gifted minds of this country are busily engaged in soliciting the forces of nature, in a vast variety of ways, and through every channel which exalted genius can suggest. The vast hidden secrets of nature are being probed into with a perseverance which nothing can subdue—with a sagacity which nothing can baffle. Every postulate is being verified, or stripped of its speciousness, and thrown aside worthless. In the lexicon of the modern chemist, there is no such word as fail. Dropping the potential for the positive and actual, he probes into the most hidden crypts of the vegetable cell, and imitating its chemistry, he produces from elemental matter itself, the complex products of vegetation. He produces the vegetable alkaloid, with its high atomic composition. By dexterous manipulation he drives out the single atom in a compound, and inserts in its place a complex molecule. The monad yields to the triad or tetrad, and he builds up compounds whose complexity was deemed an insuperable objection to their formation, only a few years ago. It will be my task to bring before you some of these wonderful carbon compounds. That they will deeply interest you there is not a doubt, for every atomic movement of this protean carbon is fraught with wonder and with wisdom.

NEW YORK, March, 1867.

On Poisons.*

BY W. W. HADLEY, M. D.

Prof. of Materia Medica and Therapeutics in the Eclectic Medical College of the City of New York.

THE term poison is defined to be, "a substance which, when administered in small quantity is capable of acting deleteriously on the body"—but this definition is not thought to be satisfactory by many, as substances may be harmless when used in small quantities, yet when used in larger amounts, they may prove destructive to animal life, and consequently would prove as poisonous in point of fact as the former when used in small quantities.

Therefore, a more sensible and expressive definition would be, that "a poison is a substance which, when taken internally, is capable of destroying life without acting mechanically on the system." This however, is not a strict definition of the term, for some substances may act as poisons by absorption when applied to the skin, or a wounded surface, as cantharides, corrosive-sublimate, arsenic, etc., while others again, as the poison of the viper, hydrophobia, etc., may have their poisonous effects when introduced by a wound, and not be poisonous when taken into the stomach. In view of the whole subject then, a poison might be defined to be, "a substance which, when taken internally, or applied to the surface of the body, is capable of destroying life, without acting in a purely mechanical manner."

---

* Read before the Brooklyn Academy of Medicine.

Substances innocent in themselves may, however, destroy life, as iced-water, or cold drinks of any kind, taken under a great degree of excitement, at the same time they are not regarded strictly as poisons. So it seems very difficult to define properly what is meant by the term poison.

In case of criminal poisoning it would not be essential for the law to know whether the substance administered to destroy life were a poison according to the above definitions, or whether it proved fatal from its mechanical effects upon the body; in either case the criminal who administered it, if intentionally, did so for the purpose of destroying life, and would be tried on the charge of murder or manslaughter.

I do not, however, design to pursue the subject in the direction of its legal or criminal bearings, but to speak of it as it has reference to us as members of the Medical Profession. A cardinal principle of our creed is, to cure the sick, and to do it without injury to the tissues, or destroying the capacity of the various healthy functions of the body. We are called upon at times to resort to the use of powerful and active remedies; remedies which if exhibited in undue quantities, or when their use was contra-indicated by some idiosyncrasy, or some peculiarity of the disease, might not only aggravate the symptoms of the patient, but be the means, in some cases, of producing fatal consequences. As for instance, the use of quinine when the stomach is in an irritable, or inflamed condition, and the use of drastic and powerful purgatives in case of enteritis, might so increase the pathological state as to preclude a favorable termination. In these cases, the medicine, though not actually a poison, might still have the effect of a poison, in proving destructive to life. Many of the remedies which are constituents of our Materia Medica, are classed under the head of poisons, if employed in an indiscreet manner, if used in too large doses, or at improper times; and when we speak of a remedy as being indicated in certain diseases, we do not design to be understood that it may be given in those diseases with impunity, in any stage, regardless of the peculiarities which may be manifest, or the quantity which is to be administered.

We have, as I before remarked, among the list of our remedies many agents that are classed among the poisons, medicines that are useful and valuable, and which we could not well dispense with in the practice of our profession. Although these are capable of destroying life if used without discretion, we employ them every day, and some one of them in almost every form of disease. Yet when given by a skillful hand they manifest their valuable qualities, and fulfill indications we should fail to reach without their use.

And yet, under the definition previously given, they are poisons, they will destroy life. Some physicians contend they do not use poisons, that they use no article that can destroy animal life, while still they resort to the use of Epsom Salts, which has been known to kill, also common salt—the chloride of sodium. We make extensive use of Gelseminum, and find it available in a great variety of diseases. Indeed, we scarcely know how we should be able to find a substitute for it, for its arterial, sedative and relaxant properties, are among the most valuable that can be conceived of in a medicine. Also the Veratrum Viride, which is extensively resorted to in the treatment of inflammatory and febrile affections. These articles are both said to be poisonous in their effects, although there are some who are disposed to question this view of the case, still I am of the opinion that under certain circumstances, their use would be fatal.

Opium, and its various preparations, are articles, about whose destructive effects upon the human system there is no difference of opinion; if administered in an overdose, the result upon life is as certain and effectual as that of the Bohun Upas, or the Wourali poison; and yet it is as extensively used in the treatment of disease as perhaps any other one agent which enters into the list of medicines.

I might speak of other articles of the class, as Hyosciamus, Conium, Digitalis, and Belladonna, but I have referred to enough to elucidate the principle, though these latter articles are often employed as medicines with safety. What I wish particularly to draw attention to is, their effects as poisons. There is no doubt but they will destroy life, and the question arises, how is this accomplished. They do not produce disorganization of the tissues, that is, they do not create organic lesions, which result in ulceration and decay, and a wasting away of the powers of life by corroding or exhausting discharges. It is not in that mode that they have their influence in terminating existence. But their impression is made upon the brain and nervous system; they create an obtuseness of the nerves to the effect of impressions upon them, and render them incapable of appreciating those impressions which they would do in their normal condition. We resort to them in medicine for these qualities they possess, to quiet exalted nervous conditions. But if they are given in over doses, the effect is carried to far, the functions of the nervous system are suspended, and the functions of life as well. In an autopsical examination, we find the body with no lesions that could cause dissolution, the parts are all of them perfect, yet they are but the clay of which they were formed, there is no life there. We see the effect these agents have had upon life, we see the destruction that has followed their use, but could we, by any means, have kept up the vitality of the body, while the system was laboring under this depressing influence, till the effects of this noxious agent had passed away, the life principle would again assert its presence, and the person who had trodden so near to the dark waters of death, would be once more restored, free from any permanent injury resulting from an indiscreet use of the drug.

We discern from this view of the case, that these articles may be employed in suitable doses in the treatment of disease; that under peculiar circumstances they are almost indispensable, that when used as they should be they produce no ill effects, and when they have ceased to act they leave no pathological impressions as sequelæ of their exhibition.

There are other agents which are denominated poisons, which have been used as medicines from time almost immemorial, whose characters have been before the public for investigation for approval or condemnation, and whose reputations for benignity in the treatment of disease are not of that unspotted description that should be looked for in agents employed in those emergencies where human lives are at stake.

If an agent be administered and fulfill the indications we desire and expect, we naturally regard it with extreme favor; if, on the other hand, instead of accomplishing the purpose we had designed to do by its use, it had produced some other effect entirely foreign to our intentions, and so different that it had caused us more trouble than had the original disease which we had used it to remedy; we lose confidence in its vaunted efficacy, or it fails to gain that place in our regard which we give to those of a more reliable character.

The Arsenious Acid, commonly known as Arsenic, is an agent quite extensively employed in the treatment of diseases; said to have been used with great benefit in many cases; has been used in the form of Fowler's solution in cancerous affections and skin diseases, also used in intermittents. Other preparations of the same are used in cancer-plasters to destroy the disease, but they many times destroy the patient; he dies of gastritis, not knowing perhaps that by absorption the drug will be carried to the stomach, and by its specific effects death will ensue as certainly as if it had originally been taken into that organ. Consequently we are obliged to deem it unsafe. The Tartrate of Antimony and Potassa, in other words Tartar Emetic, is very extensively used as a diaphoretic and alterative, also as an emetic and expectorant. It forms one of the ingredients in the Hive syrup which is often given to children, and often kills a great many of them, as well as adults. It is one of those poisonous agents used with too little regard for that caution which every one should show, who has any hand in dispensing medicines for the sick. It produces inflammation and corrosion, and consequently death.

There is another to which I would direct your attention for a moment; that is Mercury, and its various preparations. This has many a stain upon its reputation, so many that I fear it will be many a long day before they will be all blotted out. It is among the articles very generally used by a large class of physicians, and is regarded by them as the only agent that can be relied upon in the treatment of certain hepatic affections.

It is also used as an alterative, and many say it is the only reliance in syphilis. How often do we see the tissues and bones of the human frame destroyed by its pernicious influence, and how often mercurial sores and ulcerations are presented for our treatment, I need not stop now to inquire; it is probably enough to say that there is no physician who has not seen more or less of them.

And when persons fall into a debilitated and cachectic condition, and droop and die, without any apparent disease manifesting itself; by tracing their history back a few years we too often find that they have been salivated, or that they have passed through some severe disease in which the poisonous preparation has been administered to them *ad libitum.* If it did not exert its malignant influence upon them sufficiently to produce an immediate fatal effect, it so deranged some of the organs of the body that they could never again be restored to their natural state, and a lingering diseased existence, and anxiously looked for termination of their sufferings in death, has been the sad experience of too many, who have been told that nothing else could do them any good. I need not in detail enumerate the noxious effects of this agent when employed as a medicine; they are too well known to all of you, and are becoming so to the thoughtful and intelligent throughout the land; but an inquiry which would be pertinent just now is; why is the article used as a medicine if it is followed by such pernicious results?

I confess I am at a loss for an answer that would be satisfactory to myself, and I much doubt being able to find one to satisfy others. The only apology I can imagine one could make to his conscience for prescribing it would be, that it has been in use so long, and been sanctioned by the authority of such eminent men; and that he knew of nothing better in certain cases; for I should be sorry to think that human nature could be so depraved, as has been charged, that any physician would administer it for the purpose of creating more disease, that his own services might the more frequently be in requisition.

I have stated all I intended to regarding these virulent corrosive poisons; those mentioned in the earlier part of this article are dangerous if carelessly used, but excellent and almost indispensable if used with discretion; the last are dangerous under any circumstances. No amount of education or experience can prevent their occasional destructive tendency, or stay their ravages till death ensues. I have only to add that remedies are known and extensively used, which are substitutes for those dangerous agents mentioned above, and which will fulfill all the indications, and more, that are expected from them. As they enter more into use their virtues are better appreciated, and it is not too much to hope and expect that the time is rapidly approaching when innocent remedies shall constitute the armature of the practitioner of the art of healing.

New York, 546 Broadway.

Pulsatilla. (Anemone Pulsatilla.)

BY A. P. PARSONS, M. D.

This peculiar plant, a native of Europe, has never been thoroughly tested, as a therapeutic agent. In Good's Study of Medicine, *Vol. 5, page* 147, the only reference made to it is, that an extract was used by *Baron Stoerck*, which is called *Pulsatilla Nigriens*, which is probably the *Anemone Pulsatilla* of Linnæus. The experiments of *Baron Stoerck* with this agent were such as to induce some others to give it a trial, and with such success as to introduce it into the Edinburgh Pharmacopœia, as a remedy for internal use. Some German practitioners, Schmucker, Bergius, and Richter, used it in very large doses, but became frightened with its powerful action, and used their influence against its employment, and it soon went into disuse. Its use was confined principally to diseases of the eye, both internally and externally. It is only referred to in the U. S. Dispensatory, in the Appendix, as a remedy used as a substitute for the *Anemone Pratensis*, which latter article was used by *Stoerck*, who I suppose is the same *Stoerck* referred to above. Syphilis, diseases of the eye, cutaneous diseases, and whooping-cough are the only diseases mentioned in which it was used. The preparation was given in doses of from two to twenty grains daily, of the extract, whether alcoholic or aqueous we are not informed. The information we glean from our own authors is very limited indeed. King, in his Dispensatory, says very little about it, and does not refer to it at all in his Family Physician, while Paine simply refers to its substitute, *anemone nemorosa*, and says nothing of the *anemone pulsatilla.* With the Homœopaths it is a very important remedy.

The use of the true anemone pulsatilla must have been very limited in this country, owing mostly to the fact of scarcity. Several years ago, while in New York, I accidentally, while in a drug-store in Chambers-st., heard the article called for by a German physician, who said it was the only thing he found that would cure sore eyes, on the low lands of the city where he resided, which disease was always preceded by an eruption resembling scald-head. Upon inquiry, the druggist informed me he had sold none of it except to this German. He ordered it from Liverpool a year and a half previous with other drugs. It was labelled *Alc. Ext. Anemone Pulsatilla.* I purchased it, thinking to use it for scald-head, and partly because he urged it upon me. I used it with lard and simple cerate rubbed together to form an ointment.

℞ Ext. Pulsatillæ, grs. x.
Adipis suil.,
Cerati, *aa.* ℥ ss.
M.

I also dissolved it as follows:

℞ Ext. Pulsatillæ, grs. iv.
Aquæ, ℥ j
M.

Just moisten the scalp and apply twice each day for three days, then use the unction three days, and so alternate. I now give it internally, ½ *gr. three times per day*, instead of styllingia, or other alteratives. In sore eyes of intemperate persons it works well in thin, spare patients, but not with those of plethoric habit. I have given it in ½ gr. pills in obstinate cases of vomiting in pregnancy, with good results; if dissolved in the mouth it acts more promptly. In venereal disease, for pain in the bones, priapism, and chordee, it is a prompt remedy, and I doubt not is a valuable alterative in any stage of the disease. Half to one gr. pill at bedtime, for a consumptive, especially for tuberculosis, aids expectoration, quiets cough, and produces anodyne effects. It seems to exert a good influence upon the lungs, and pectoral secretions generally. If a venereal taint is apparent, use it three times per day for not more than three days in succession, as its laxative effects may develop themselves actively and suddenly. If there be an undue excitement of the sexual organs, either male or female, push the remedy until quieted; once controlled, a small quantity will maintain its influence. In nervous diseases it supplies a place in which we often find our usual remedies deficient. Where there is debility and loss of action in the nerve centres, especially if morphia or any preparation of opium has been used, it will rarely fail to give relief. It seems to prevent the loss, or perhaps more properly speaking, to increase the nerve force, assisting the action of restorative medicines. Whooping-cough is somewhat controlled by it. Added to our usual cough syrups instead of opium, it produces good results. The essential tincture, added to simple syrup so as to give one or two drops ess. tinc. to a tea-spoonful, is a very good way to give it. It will relieve globus hystericus much sooner than opium. Give with warm water with sugar and spirits if convenient. When a prompt action is desirable five to fifteen drops ess. tinc. repeated every ten to fifteen minutes, until relaxation is apparent.

Dr. Miller, of Minnesota, has tried many experiments with the *Anemone Ludoviciana*, which is described in the American Journal of Pharmacy by A. W. Miller, who finds the properties nearly identical with the article we have been considering, and of this we are now using as a substitute for the other. If it sustains, in all its virtues, the *Anemone Pulsatilla*, we have a remedy in great abundance and of intrinsic merit, which we must investigate, by applying the test—which is to give it and watch its action closely. Our ever persevering and practical botanist, Mr. Nuttall, states, there are large quantities near the junction of the Missouri and Platte rivers, and thence west to the Rocky Mountains, and later it has been found in Minnesota. It flourishes on dry sandy bluffs, the same as in Europe, which, with its peculiar characteristic resemblances and similitudes, led to the conclusion that it is destined to act as a perfect substitute. I hardly think it possesses the power, for I notice in giving the ess. tinc., which I procured from Cincinnati, a prompt effect is not so apparent, and it is more inclined to produce nausea. I once procured some of the Homœopathic tinc. which answered a very good purpose, but that procured since was worthless. Its most prominent effects are *nervine*, *antispasmodic*, *antiphrodisiac*, *expectorant*, *emmenagogue and diuretic.* It will sometimes produce griping, (but rarely nausea,) with copious watery stools. Its active principle, the resinoid *anemonine*, I have not tested much; that article which I used perhaps was not pure, or at all events, did not produce the effects I looked for, in several cases, and I have not obtained any other specimen. My preference is for the essential tincture.

Anniversary of the Brooklyn Academy of Medicine.

The Brooklyn Academy of Medicine—auxiliary to the Eclectic Medical Society of the State of New York—held their tenth anniversary on Wednesday evening, March 6th, at the lecture-room of the Young Men's Christian Association Rooms. The President of the Society, Dr. Henry S. Firth, presided, and called upon Dr. A. H. Robinson to open the proceedings with prayer. After the prayer, Dr. Firth addressed the audience in an extemporaneous manner, congratulating the Society on the recurrence of their anniversary, and giving in brief the history of eclectic medication.

ADDRESS OF DR. ALLEN.

Dr. Allen read the annual address, his subject covering the entire history of eclecticism, its theory and practice, and also a thorough and learned analysis of the allopathic school, the duties and prospects of eclectics in establishing societies, colleges, and journals. He first alluded to the responsibility and character, morally and professionally, of the family physician, and the necessity of each student cultivating a laudable ambition thereto. He would direct their thoughts to the methods by which their character as professional men could be universally and firmly established. He said: Here assembled in the Brooklyn Academy of Medicine—a brotherhood of physicians who, many of them, twenty years ago, honestly came to the conclusion, from observation, study, and reasoning, that the commonly received system of medicine denominated allopathy was not the best system; that far more efficient remedies for the cure of the sick than those used by that practice had been discovered; that blood-letting was the letting out of life; that the giving of mercury was the giving of a miserable poison; that the exhibition of antimony was a wasteful depression of vital power; that the giving of powerful and irritating purgatives, day after day, in fevers and inflammations, which would kill a well man, would surely kill a sick one; that to opiate a man, or a child, hour after hour, was to hide the real features of the disease, to make him weaker when he came out from that stupefaction, and perhaps to fasten upon the brain some disease induced by the well-known tendency of opium to produce congestion of that organ; that almost this whole system of depletion and stupefaction and poisoning was unscientific in theory, utterly opposed to the hygienic laws of the system, and dreadfully fatal to the sick.

Many of us were educated in this self-same system of allopathy; and we were slow to question its teachings, slow to doubt its practice at the bedside. The centuries past had contributed to make this system. Wise men of many ages, and all their teachings as to inflammation and fevers, and the nature and symptoms of the various diseases, had educated our brains and our hearts too, to have confidence in its doctrines and remedies. We asked ourselves, as we saw the failures of this system in typhoid and other fevers, in rheumatic and other inflammations, in dysentery, in cholera, in scarlatina, and in many other diseases, both acute and chronic, if it could be that such men as Cullen and Hunter and he whom we would call the Webster of British medicine, Thomas Watson, were mistaken? if it could be that Velpeau and Louis, of Paris, who seemed to carry to the *ultimate* the diagnosis of surgical and medical diseases, were yet unacquainted with the true theory of surgery, and the true practice of medicine? if it could be that Warren, of Boston, and Hosack, of New York, and Wood, of Philadelphia, did not know the best agents for the cure of disease? Our experience at the bedside and the failures we saw made led us to distrust them all as to the remedies they employed; and when we came to study other remedies, and test their power, we arrived at the inevitable conclusion—clear as noonday—that these fathers in medicine had been mistaken, and we had been mistaken, and that we had studied a system which was not a true science; that it was unsound in theory and destructive to life and practice. We proved this, and great was our satisfaction to receive a better practice.

The speaker then alluded in glowing terms to the rapid rise of eclecticism as keeping pace with other reforms and discoveries of the age. He alluded to the present firm hold of eclecticism on the affections of the people—giving facts and statistics, showing its wide-spread power and influence. He thought the want of organization at first among the pioneers was proper and natural, as it developed each man's individuality and powers to the fullest extent, which all schemes in their infancy need; and, finally to prove the truth of their system, this large body of intelligent independent practitioners united in their conclusions, and are now forming a compact organization, invulnerable and everlasting, gaining the confidence of the people, and certain to ride over allopathy in a body, if eclectics would be true to themselves; but if not true to themselves their remedies would be gradually appropriated by others, without giving them the credit due. He urged the further completion of the organization and of the system. He advocated a National Eclectic Medical Society and a Pharmacopœia. He called attention to the injustice to the intelligent people of the State from colleges that are endowed by the State refusing their instruction to students of the eclectic persuasion. This he said was contrary to the authority and the spirit of the laws. He said the homœopathic and eclectic families of New York and Brooklyn now pay, and have paid for years, more than one half of the millions that have built up the colleges and hospitals and infirmaries of New York and Brooklyn; and now these professors and State Medical Society of New York turn round and say to us: Your sons cannot graduate from the institutions which you have endowed unless they study with allopathists; we believe in no liberty of views in medicine; we are right, all others are wrong; we care nothing about your convictions of right as to methods of medical practice; we care nothing about your rights as citizens and taxpayers; we have the power in our hands, and will use it to deny to any man a graduation from our halls of medical science, unless you deny your medical faith and make yourself our servant, to be moulded, like papier mache, into any model we propose. Such is the barbarism of allopathy in this cultured city of Brooklyn; such is the Christianity of allopathy in this City of Churches; such is the usurpation of law proposed by Dr. Hutchison, the representative of a college in this city, and officially voted by the State Society. He entered his firm protest against this usurpation.

The Doctor then went into a learned analysis of the comparative effects and merits of the two systems, too lengthy for our columns. He claimed that they greatly needed an officinal list of strong tinctures for the pocket case of both city and country practitioners, which shall be as strong and as pure as it is possible to obtain; tinctures at least four times the strength of the present officinal tinctures of the U. S. Pharmacopœia. They can be prepared without heat, and preserve the exact properties and aroma of the plant far better than any fluid extract. They are clear and beautiful preparations, but they require choice materials, experienced manipulation, and powerful machinery. But when thus prepared they are beyond all value to every practitioner. When we have a pharmacopœia which shall establish the formulæ for the preparation of these and all other medicinal preparations more perfectly than the U. S. Pharmacopœia, more perfectly than the present Eclectic Dispensatory, we shall have far better remedies; and we shall all understand each other, as to remedies, in our reports of cases. It will be a complete and uniform officinal guide for eclectic druggists throughout the country, in the preparation of their remedies; and great improvements can be introduced in reference to all classes of preparations. Our remedies will be not only more uniform, and be officinal; not only more compact and convenient; not only more efficient and choice, but formulæ should be introduced, whenever possible, by which efficient, pleasant medicines shall be introduced. This is not merely a matter of taste, but of the highest practical importance. We have no right to dose our patients with nauseous mixtures, when, with more study, pleasant remedies and more efficient ones can be used. Our professional success demands this, because unpleasant medicines are not in very many instances taken regularly; not unfrequently they are greatly neglected; and if all here could now give their testimony, we should have their evidence that sometimes they are *thrown away!* Society has arrived at a refinement and civilization when a large majority of adults will not continue to take from day to day, unpleasant medicines; and when parents will not consent that their little children shall be drugged with them. Let us *recognize* this fact. It seems entirely probable to us that homœopathy, in this city and New York, owes three-fourths of its patronage and popularity to *pleasant medicines.* And, from our own observation of, and experiments with, the *materia medica* we believe that, by directing *special attention* to the *preparation* of compounds, nearly *all* of them can be made *palatable.*

He said we must develop our own indigenous *materia medica*, and introduce whatever was of value from both homœopathic and allopathic systems. The truth is that eclectics are the progressive, scientific party in medicine, and we think that we are correct in saying that no position in reference to methods of treatment adopted by eclectics within all these thirty years past has been successfully controverted. Our opponents are now violently contending among themselves as to many of their remedies. A large party of medical leaders in England are now denouncing blood-letting ; and Dr. Ives, of New Haven, in a recent essay before the State Society of Connecticut, radically opposes the use of calomel, and totally denies its long-supposed specific action upon the liver ; and Professor Hodges, of the Massachusetts Medical College, recently stated that "mercury was not so much as to be named as a medicine."

The Doctor concluded with a strong appeal to his brethren to hope and strive ; that the future was bright. "In fact," he said, "we have only one slight difficulty, and with the suggestion of that we close. In discussing some time since with an eminent lawyer and statesman of Boston our system, he remarked, 'There is only one difficulty with eclecticism ; you are fifty years ahead of your age !' Gentlemen of the Brooklyn Academy of Medicine, I give you this sentiment : May we ever keep 'fifty years ahead.'"

Dr. Robert Newton, Professor of Surgery in the Eclectic Medical College of New York, was then introduced as one of their Major-Generals in the service. His speech was a running fire at what he termed the absurdities and barbarities of allopathy. His remarks were satirical and severe, and kept the audience in a continued round of laughter. He compared the allopathic diploma which he possessed to the ancient Papal indulgences through which a man could go and sin with impunity. So he, he said, could go around and salivate the jaws out of as many people as he pleased, and nobody could touch him for it. He considered such a license immoral, barbarous, and unworthy the age. He said business men were now waking up to facts, for they are establishing life insurance companies on fifteen per cent. easier terms with policy holders of the eclectic persuasion.

Prof. Newton addressed the audience for nearly an hour and resumed his seat amid applause.

A vote of thanks was given to Prof. Allen and also to Prof. Newton for their instructive and able addresses, and the physicians present then adjourned to their banquet at Dr. D. E. Smith's, in Fort Green Place. The tables were laden with a most bountiful and excellent repast. The members of the Academy and their ladies, with some prominent and influential friends in number about sixty, here spent some three hours in giving every attention to the well-spread tables before them, and to listening to the sentiments and speeches of the occasion. Intelligence, pleasantry and professional zeal gave to the occasion an interest long to be remembered by every one who was present.

Prof. Freeman introduced the social exercise of the occasion by a sentiment in honor of "mine hosts," Dr. Smith and his accomplished lady, and he was followed by many others, among whom were Professors Newton, Hadley and Allen, Doctors Smith, Stowe, Whitney, Firth, Fearn, Irish, Horton, Nirr, Boskowitz, H. L. Stuart, Esq., Frank Tabor, Esq., and several others whose names do not now occur to us.

The eclectic practice is most evidently in much favor and patronage among the intelligent people of Brooklyn; and the occasion most impressively suggested with what favor and enthusiasm our system would be received in every city, if eclectic physicians would everywhere unite their efforts and form themselves into enterprising medical associations.

PERISCOPE.

On the Treatment of Rheumatic Fever. By J. Birkbeck Nevins, M.D.

Dr. Nevins, in reference to a growing tendency to consider that it is a matter of indifference whether anything at all is done in rheumatic fever, except to keep the patient quiet in bed, and supply moderate nourishment, submits a plan of treatment which he has long practised, and which it appears to him has led to the following results:—1. Speedy relief of the patient's most urgent symptoms; 2. Diminution of the general duration of the case; and, 3. Restoration of strength, with less tendency to heart-complications or relapses than usual.

The remedies to which he attaches importance are:—

1. The vapor-bath, and subsequent cold douche; and,
2. The combined use of quinine and iodine.

In a case related, the bath was given in bed, for the patient could neither turn in bed nor move his limbs; "and," states Dr. Nevins, "it will generally be necessary to give it in bed, in the first instance, in any case deserving the name of rheumatic fever; and it is so easily administered, that no difficulty can arise to prevent its employment in every case.

"Two large pieces of coarse flannel (common scouring cloths answer the purpose admirably)," he continues, "are to be soaked in common vinegar;* about a pint being necessary for each cloth. Two common bricks are then to be heated nearly red-hot in the fire, folded up in these flannels, and placed on two plates. The patient being stripped, one plate is to be put a little distance from one knee, and the other a little distance from the opposite shoulder, and the patient is to be covered over with the bed-clothes. In a few minutes he is surrounded by a most refreshing steam-bath, which produces a warm, agreeable perspiration, that may be kept up for twenty minutes or longer, if the bricks retain their heat sufficiently.

---

* For many years I soaked the flannels in simple water; but the vinegar is so much more fragrant and agreeable to the patient, that I have always used it for the last few years.

"As soon as it is decided to remove them, the patient, still in bed, is to be very rapidly mopped all over with towels wrung out of cold water, then immediately wiped dry with dry towels, supplied with a warm shirt or flannel garment, and covered with a fresh, dry sheet, &c., or with blankets alone, as may be most agreeable to him.

"The effects of this bath are a speedy relief of the acute pain, and frequently easy sleep for a time; an abatement of the offensive and distressing acid sweats; and a general state of greater comfort.

"The cold water application immediately on the removal of the hot vapor is very important; as it prevents the continuance of an enfeebling perspiration after the hot bath.

"The manner of removing the patient's bed-garment is a point of importance in cases of such painful helplessness as rheumatic fever; and it is accomplished without pain to the patient or difficulty to the nurse by an extremely simple contrivance. The clothes must be torn down the back from top to bottom; and when this is done they can be removed and replaced as easily as a child's pinafore, without even lifting a limb of the patient or disturbing him in bed. By this means, fresh, clean, dry clothing can be applied without difficulty once or twice a day, according to the amount of sweating; and the sufferer is relieved from the discomfort of his damp, offensive garments.

"This bath may be repeated twice a week; and during seventeen years that I have been in the habit of adopting it, I have scarcely ever had to use it a third time in bed; the patient, after the second bath, being almost invariably able to sit up and have the third in a chair.

"When he is able to sit up, a steam-bath can be given with great ease by putting a bucket of boiling water under a chair, the seat of which is sufficiently protected to prevent the patient from being scalded whilst he is sitting upon it surrounded by blankets; and, by putting a red-hot brick into the water in the course of ten minutes, the steam is kept up, as by this time it generally begins to abate from the original boiling water.

"A jug of cold water may be poured over the patient when the blankets are removed, or he may be wiped by cold wet towels, as is most agreeable to his own fears or feelings, and he must then be clothed and sit up for a few hours.

"The second part of the treatment upon which stress is laid, is the combination of moderate, *i.e.*, two-grain doses of quinine with five-grain doses of iodide of potassium from the first. The theoretical grounds on which quinine was first proposed have been already mentioned; and the general experience of the profession will suggest the explanation of the probable benefit to be looked for from the addition of the iodine."—*British Medical Journal.*

On the Nature of the Poison of Contagious Diseases. By Dr. Lionel S. Beale, F.R.S.

In his report to the Royal Commission on the Cattle Plague, published in detail in the third report of the Commissioners, Dr. Beale has,

(1.) Advanced facts and arguments which seem to him opposed to the view that the contagious matter consists either of insects, of animalcules, or any kind of vegetable organism.

(2.) He thinks that it consists of living matter formed in the organism of man or animals—the particles being exceedingly minute, and capable of retaining their vitality for a long time, and under various conditions, although separated from the body.

(3.) That these living particles bear somewhat the same relation to the germinal matter of normal cells that pus-corpuscles or cancer-cells do, and therefore that the contagious germs have been derived by continuous descent from the normal germinal matter of the organism. They may have descended from a lymph or white blood-corpuscle, or from the germinal matter of an epithelial cell.

(4.) If this be so, the living contagious particle is not, Dr. Beale holds, of the nature of a *parasite*, nor can it be regarded zoölogically as a species, nor has it originated in the external world and grafted itself upon man, but it has originated in his organism, and is, indeed, degraded living matter descended from what was once normal living matter of the body itself.—*Medical Times and Gazette.*

On the Relation between Cholera and the Diarrhœa which accompanies it, and the Treatment of the latter Disease. By Sir Henry Cooper, M.D.

From a review of these important questions, Sir Henry Cooper concludes that—

"1. In epidemics of cholera an unusual amount of diarrhœa prevails; it precedes cholera, and extends latterly beyond it.

"2. In the ordinary course of an attack of cholera, diarrhœa is the first symptom, and is undoubtedly the first stage of the disease.

"3. This premonitory diarrhœa is not distinguishable by its history or symptoms from the sporadic or ordinary diarrhœa.

"4. Cases in which diarrhœa has been stayed do not pass into cholera, while those in which it has been neglected may and often do.

"5. The astringent mode of treatment is generally as efficacious in arresting diarrhœa during cholera visitations as at ordinary times.

"6. And, as a corollary from the above, it is the duty of those in authority in cholera epidemic seasons to search out and arrest *all* cases of diarrhœa, by the organization of a sanitary police for the detection of the disease, and its treatment in its earliest stages."—*British Medical Journal.*

On the Treatment of Chronic Dysentery. By Mr. Harry Leach, Resident Medical Officer of the "Dreadnought" Hospital Ship.

Mr. Leach states that no disease in the practice of the "Dreadnought" hospital ship has been treated with so great a variety of drugs as chronic dysentery. The number of remedies is a measure of the obstinacy of the malady, and the ineffectiveness of the treatment usually adopted in this malady. Depressing, however, as is this result, the physician is not altogether helpless, and at times he sees his efforts crowned with success. The course of treatment recommended by Mr. Leach, from his large experience, is strictly based upon the pathology of the disease. He says:—

"The pathology of chronic dysentery is, in influencing treatment, chiefly confined to the simple fact that ulcers in variable numbers, and equally variable stages, exist along the course of the large intestine. They may be large, few in number, and may exist only near the caput coli. They may be many in number and small; and if this be the case, they are generally scattered pretty equally over the whole course of the large intestine. They may penetrate only the mucous coat of the bowel, or may burrow so deeply through the middle and into the external coat as to produce an hourly risk of perforation, and consequent peritonitis. But be the number and state of the ulcers what they may, putting minute and impractical considerations aside, it is clear that our endeavors must be mainly, if not wholly, directed to the giving to these ulcers a favorable opportunity of healing and cicatrization. . . . . . . Having regard to the very large number of cases admitted into this hospital, and being sure, from personal observation, that drugs have had a fair and impartial trial, I am compelled to arrive at the conclusion that in cases of chronic dysentery (if the disease be of more than three months' standing) very little specific good can be done by any of the so-called remedies commonly used. The only drug that can be said to have produced a definite amount of relief in any number of cases is the compound powder of ipecacuanha, and I am by no means prepared to give a very decided opinion about its efficiency. A dose of castor-oil and laudanum, given occasionally, often assists the evacuations, and affords relief from tenesmus. Beyond these, the extent of my belief in drugs no further goes. And hence it may be said, and reasonably maintained, that, as chronic dysentery may recede from the path of recovery by meddling and muddling medicine, so we may medically enjoin and employ rest in these cases as confidently and as happily as does Mr. Hilton in 'Accidents and Surgical Disease.' And rest should mean not only absolute quiet for the body, but for the bowel also. The influence of this single condition is marvellously shown in many cases admitted to the 'Dreadnought,' the progress of which cannot but lead us to refrain from meddling with the accomplishment of a process that simple quietude has evidently caused to begin. In analyzing a list of fatal cases, it is found that half die from exhaustion, no other lesion except extensive ulceration along the colon being discoverable. The other moiety of cases is hastened to an end by complications of bronchitis or cirrhosis, hepatic abscess, or peritonitis. As therefore our efforts should be directed to the sustentation of the system until nature has accomplished the healing process, it is particularly necessary that care should be used in the choice and administration of diet. Milk, beef-tea, and eggs, in small and oft-repeated portions, should form the staple of the patient's food for some weeks after admission, varied occasionally by rice, arrowroot, or any other good invalid cereal. Strict quietude in the horizontal position cannot be too strongly insisted upon. If much pain exist, it may be relieved (and that without the use of opium) by light and warm applications to the abdomen. The use of stimulants is, I believe, still an open question among most practitioners; but experiences gained at this hospital lead to the conclusion that they should, as a rule, be entirely avoided. An extra allowance of good beef-tea will do far more to sustain the patient than wine or brandy, howsoever given, and I am sure that in many cases the latter are positively injurious. A placebo must, of course, be prescribed, for as there are few, if any, cases so tedious, so none require more encouragement by all the arts that influence the mind in the conservation of the body. A month, or two, or three, may elapse, with little, if any, signs of change for the better. In many cases a fatal result disappoints our best expectations; but they who, having lingered the longest, at length end well, are those with whom therapeutics have little or nothing to do. The most favorable results can, of course, yield only a condition of comparative health, which any imprudence as to change of clothing or diet will speedily disturb and destroy. But when men, after months of probationary slop-food, reach successfully to the stage of beef and mutton diet, we discharge them as convalescents, with a good hope to them of a renewal of the lease of life. Good and gentle nursing is of paramount importance, for the vital powers are so feeble, that any risk of bed-sores must be most scrupulously avoided, and would almost invariably precede a fatal result.

"The tendency of the foregoing remarks may be condemned as too totally abandoning all therapeutic aids, but they will effect the purpose of the writer, if only they assist to propagate a plan of treatment that will allow cases of chronic dysentery to be cleverly nursed and fed, rather than actively stimulated and physicked."—*The Medical Press and Circular.*

Sequelæ of Surgical Operations.

M. Maisonneuve thinks that of every hundred patients who die after surgical operations at least *ninety-five* are poisoned. This he explains by showing that in most cases of the kind referred to, certain morbid products, the result of the operation, are developed either in the blood or on the surface of the body, and make their way into the system. He formulates his remarks thus: (1) The blood and other animal fluids, when exposed freely to the air, or in contact with aqueous substances, soon lose their vitality. (2) Once dead, they are liable to putrefy under the influence of heat, moisture, and air. (3) The products of such putrefaction are highly poisonous. (4) It is the same with such secretions as the urine, bile, and intestinal juices. (5) In infiltrating the permeable tissues with which they are in contact, these poisoned liquids give rise to gangrene, erysipelas, &c. (6) These same liquids, either by themselves or mixed with the special products of inflammation they provoke, can, in entering the circulation, alter the blood and disturb important functions. (7) After their expulsion from the general blood-vessels they may remain in the capillaries, the parenchymata, serous tissue, &c., and give rise to abscess, anthrax, &c. (8) The entirety of the disturbances constitutes surgical fevers. To prevent these terrible consequences of operation, M. Maisonneuve suggests the adoption of the subcutaneous method, and the employment of all means of preventing putrefactive processes.—*Lancet*, March 2, 1867.

The Urine in Acute Rheumatism.

IN a paper on the Urine in Acute Rheumatism, Dr. Thomas Steavenson arrives at the following conclusions:

1. In acute rheumatism, when the excretion of solid materials in the urine is large, the patient makes, other things being equal, a rapid recovery; on the other hand, in lingering cases, the excretion of solids is usually small.

2. As in this disease the urine is invariably scanty in bulk but (generally from this cause only) of high density, a useful guide to the progress of the case may probably be found by diluting the urine to the normal bulk, and then ascertaining its specific gravity. According as it is now of high or of low density will the progress of the disease probably be favorable or unfavorable.

3. Though the excretion of urea is usually greater during the height of the disease than during convalescence, this is not invariably the case; the reverse sometimes occurs. Though the excretion of urea is greater during the disease than during the early stage of recovery, the urea in the former stage seldom very much exceeds in amount the normal physiological excretion.

4. The uric acid is always much increased whilst the disease continues.

5. The phosphoric acid is generally in greater amount during the progress of the disease than during recovery, but the quantity of this substance rarely much exceeds the quantity secreted in health.

6. The excretion of sulphuric acid is generally increased, and often largely. In one instance more was excreted dur-

ing recovery than during the acute stage of the disease. The amount of this substance excreted is very variable.—*Half-yearly Abstract of Med. Sci.*

On the Treatment of Scabies by Oil of Petroleum. By Dr. Decaisne.

From a report published in the *Archives Médicales Belges*, we learn that Dr. Decaisne has used the oil of petroleum successfully in upwards of six hundred cases of scabies. In the great majority of the subjects the disease was completely cured after a single friction, in several after two, and in a very few instances were three or four inunctions required. The method failed in two or three cases only, and sulphuret of lime was necessary to effect a cure.

It has been objected that oil of petroleum is an irritant and produces rashes, but M. Decaisne remarks that the remedy applied with proper precautions seldom causes this unpleasant result.

"At first the frictions were performed with rough towels and brushes, and, probably in order to lacerate the sulci, the oil was rubbed violently into every part of the skin more particularly affected. The inevitable result was the exposure of the derma, and rashes consequent on the mechanical irritation. Military surgeons have, however, found from experience that this is unnecessary, and now the inunctions are more gently performed. But even this plan was open to improvement. It may be a matter of indifference when the skin is healthy to use a brush, a rough sponge, or a hard towel, but in the case of scabies the vesicles are often broken, and the cuticle destroyed, and the softest aquarelle brushes should be used to spread the oil on the integument.

"Since brushes of this description have been used in barracks, the secondary eruptions have all but ceased, and when any have appeared they were the result of an error of diagnosis which cannot always be easily avoided in case of some standing. Prurigo, eczema, impetigo, are often mistaken for scabies, and in these affections the evil effects of repeated and inopportune frictions are readily accounted for."

M. Decaisne also adverts in his report to the disinfection of the clothing. Experiments instituted in the military hospital and garrison at Antwerp have shown the utter inutility of the measures in habitual use. Since they have been discontinued, relapses have become less frequent, and the inutility of disinfection is, therefore, now fully demonstrated, and this expensive procedure, founded on routine and not on scientific experience, should henceforth be abandoned. If it be even conceded for the sake of argument that the acarus can continue to live elsewhere than in its natural *habitat*, the operation would still be unnecessary, because in resuming his wearing apparel the patient exposes to the action of the petroleum with which his person is saturated, the few sarcoptes which may remain in his clothes.

The treatment with petroleum oil thus combines with its great efficacy the additional advantage of economy, because the process of disinfection is dispensed with, and the entire cost of the medication does not exceed for each case three or four centimes.—*Journal of Practical Medicine and Surgery*, January, 1866.

Insufflation of Medicated Powders into the Urethra. By M. Mallez.

M. Mallez has devised for this purpose an apparatus which consists—1st, of an india-rubber ball supplied with a metallic mouth piece; 2d, of a slender catheter adjusted to a small brass cup, which can be adapted to the armature of the ball; 3d, of a catheter of larger size, open at both ends. This sound is in the first place introduced beyond the membranous portion of the urethra; the narrow tube is then passed down into its cavity, bearing in its cup the medicated powder; and pressure of the india-rubber ball now affixed to the cup propels the powder into the urethra, where it is deposited over the entire surface of the mucous membrane during the slow withdrawal of the apparatus. Experiments on the dead subject show that the operation perfectly answers the inventor's purpose.

In twelve cases of chronic gonorrhœa a cure was effected in this manner; and in five, the disease had lasted from two to four years.

M. Mallez has hitherto used bismuth powder. He is now engaged in experiments with other substances, such as the phosphate of magnesia. The instrument might be used for the introduction of medicated powders into the cervix uteri, and in almost every variety of sinus.—*Journal of Practical Medicine and Surgery.*

On the Use of Sulphites of Lime and Soda as Remedial Agents. By Dr. A. Fisher.

In a report on this subject presented to the American Medical Association, Dr. Fisher arrives at the following conclusions :—

"1. That the sulphites of soda and lime can be given to patients suffering from zymotic diseases, in large quantities, and continued for a long time, without producing deleterious effects.

"2. That, in accordance with Dr. Polli's experiments, the sulphurous acid is disengaged from the alkaline base in the system, permeating it in every part, thereby preventing fermentation or decomposition of the blood.

"3. That they do not destroy or decompose the poison in the system, but prevent its deleterious action on the blood, and consequently the tissues, until it is eliminated from the system.

"4. That the quantity prescribed should be in proportion to the malignancy of the disease; that is, the more hopeless and malignant the case, the greater should be the quantity administered in a certain time.

"5. That these remedies should not be too suddenly withheld in bad cases, but continued until the poison is carried out of the system by the emunctories.

"6. That the effect of these remedies, in well-marked cases of blood-poisoning, is imperceptible for the first few hours, but by continuing them for a day or two, the secretions become improved, and the patient is relieved of the morbid symptoms.

"7. That these remedies will not cure inflammation of an organ already established, though in cases where they are indicated, they prevent the deleterious effect of the poison until the inflammation subsides, or is relieved by appropriate remedies.

"8. That the use of these agents will not prevent the use of other remedies indicated in the particular case, unless chemically incompatible.

"9. That these remedies are generally well retained on the stomach, though the dose is large, and the sulphurous taste is disagreeable to some patients.

"10. That the more malignant and hopeless the case, the more perceptible and satisfactory will be the effects of these agents, unless the case is beyond the reach of remedies."—*American Journal of the Medical Sciences.*

Syrup of the Phosphates of Iron, Quinia and Strychnia.

Dr. Lyons has for some time past employed with, he conceives, very important therapeutic results, this powerful tonic combination, for which the profession is mainly indebted to the late Dr. Eaton, of Glasgow, and Professor Aitken, of the Royal Victoria Hospital, Netley.

The concentrated syrup of the phosphates, when made by double decomposition, according to Professor Aitken's formula, contains per drachm two grains of the phosphate of iron, one grain of the phosphate of quinia, and one thirty-second of a grain of the phosphate of strychnia. It is a perfectly clear and limpid fluid, slightly refracting light with the peculiar tint of the quinia solutions, and, viewed in mass obliquely, showing the bluish tint of the phosphate of iron held in solution. It is perfectly miscible with distilled water, has a strong styptic and distinctly chalybeate taste, and an aftertaste of quinia. It may be exhibited in doses of twenty to forty, and even sixty, minims, diluted with water, according to age and the circumstances of the case. It is well borne in the majority of cases; it acts as an invigorating stomachic and sensibly improves appetite; it is an admirable general tonic; it appears to be a readily assimilable chalybcate, and is thus well adapted for certain chlorotic and anæmic states. In the morbid states of the nervous system which precede and accompany the development of the strumous diathesis, the influence of the strychnia salt appears to be exercised with great potency as a nervine tonic and stimulant, and it would seem to be an important agent in altering the morbid state of the nervous apparatus which presides over the function of nutrient assimilation. Physiologically, this influence may be supposed to be attributable to the well-known action of the strychnia salts on the spinal cord, as well as by direct stimulus to the filaments of the great sympathetic plexuses distributed to the stomach and intestines. From the general tonic and invigorating effect of this drug, its influence on the stomach and the promotion of appetite, as well as by the improved assimilation of food which it induces, it is a very valuable medicine in cases of strumous children, threatened with scrofulous degeneration and ultimately with localized tubercular development. As a preparative to the use of cod-liver oil, and in certain cases as a concomitant to this food substitute, the syrup of the three phosphates will be found a very important adjunct in the treatment of numerous forms of strumous disease.

But the employment of this admirable combination is not limited to the cases just mentioned. In depressed states of the system in the adult and the aged, in several of the conditions tending to adipose degeneration of important organs, such as the heart and kidneys, the syrup of the phosphates will be found a serviceable and reliable remedy. Where it is desired to combine a tonic and styptic to aid in checking the drain of albumen from the system in chronic disease of the kidneys, this combination will be found of great use.

In many forms of cutaneous diseases where a tonic effect is desired, this combination will be employed with benefit.

For the use of strychnia in chorea and certain other of the maladies of children, the high authority of Trousseau and Pidoux may be cited. These distinguished authors give the following formula for the preparation of a syrup of strychnia. Five centigrammes of the sulphate of strychnia are dissolved in one hundred grammes of simple syrup. One hundred grammes contain about twenty-five *cuilerées à café* or teaspoonfuls; each teaspoonful or drachm contains two milligrammes or one twenty-fifth of a grain of the sulphate of strychnia. Dr. Lyons is of opinion that a superior efficacy will be found to attach to the triple combination above described. His best thanks are tendered to the Army Medical authorities in this city, by whose kindness Sergeant Moss of the Army Medical Stores, himself an experienced practical chemist, and who had learned the process under Dr. Aitken's supervision, has been allowed to prepare for him a specimen of the syrup of the phosphates of iron, quinia, and strychnia in exact accordance with Professor Aitken's directions.—*Medical Press and Circular.*

Elimination in Cholera.

Prof. Lionel Beale discusses ably in two articles in the *Medical Times and Gazette* (September 29 and Oct. 6, 1866) the doctrine of elimination in cholera and briefly states the principal conclusions at which he has arrived as follows:—

1. That the gland-cell is not, as a general rule, destroyed when it secretes.
2. That the poisons "eliminated" by the skin and kidneys are probably in a state of solution.
3. That the poisons of contagious diseases are not soluble, but consist of living germs which move of themselves, but which cannot be "eliminated" from the blood by epithelial or other cells.
4. That so far from there being any evidence of the epithelial cells eliminating contagious poisons, the living particles of the latter interfere with the action of the cells, and many cells are destroyed by them.
5. That the function of the columnar epithelial cells is to draw substances from the intestine and pass them on towards the blood, and that therefore it is most improbable that these cells should take part in "eliminating" anything whatever from the blood.

[If these conclusions be just—and we believe them to be so—they are fatal to Professor Johnson's theory of cholera.]

Results of the Operation of Complete Excision of the Astragalus, performed by British Surgeons.

Mr. H. Hancock, Prof. of Surgery in the Royal College of Surgeons, in a recent course of lectures gave the following statistics :—

"I have collected 57 cases. Of these, 33 were for compound dislocation; of which 5 were complicated with fracture, 12 were for simple dislocation, and 3 were for caries.

"Of the 33 performed for compound dislocation, 24 recovered with good, useful limbs; 1 underwent secondary amputation of the leg, and recovered; 8 died, of whom 1 had undergone secondary amputation.

"Of the 12 performed for simple dislocation, 9 recovered with good and useful limbs; of these 12, in 4, of whom 1 died, the bone was allowed to remain for a month; in 1 it was allowed to remain nineteen weeks; in 4, of whom 2 died, the bone was removed immediately.

"Of the 3 performed for disease, 2 recovered, with good and useful limbs; 1 recovered for a time, but the disease returned in two years, necessitating amputation of the leg, the patient, however doing well.

"In 3 the cause is not given. Of these, 1 died, and 2 terminated well.

"If to these we add 52 cases performed by surgeons abroad, we get 109 in the whole.

"Of these, 64 were for compound dislocations, of which 5 were complicated with fracture; 4 were for compound fracture; 20 for simple dislocation; 10 for disease (caries); 1 was for necrosis; of 10 the causes are not stated.

"Of the 64 excisions performed for compound dislocation, 50 recovered with good and useful limbs; 1 underwent secondary amputation of the leg, and recovered; 11 died, of whom 1 had undergone secondary amputation; of 2 the results are not given.

"Of the four operated upon for compound fracture, 3 recovered with good and useful limbs; 1 died.

"Of the 20 operated upon for simple dislocation, in 4, of whom 1 died, the bone was allowed to remain for a month; in 1 the bone remained for nineteen weeks; in 7, of whom 2 died, the bone was removed immediately; in 2 the bone was removed for secondary caries, but at what period it is not stated. In the remaining 6 the period of removal is not given.

"Of these 20, 14 recovered with good and useful limbs; 3 died; in 3 the results are doubtful.

"Of the 10 cases performed for disease (caries), 6 recovered with good and useful limbs; 1 submitted to secondary amputation two years afterwards, and recovered; 1 died; in 2 the results are doubtful.

"The patient operated on for necrosis did well.

"Of the 10 cases the causes of which are unknown, 2 recovered with good and useful limbs; 1 died; in 7 the results are not known.

"So that of the 109 cases, 76 recovered with good and useful limbs; 2 submitted to secondary amputation, 1 recovered; 16 died, including 1 in which secondary amputation had been performed; in 14 the results are not known. —*Lancet.*

On the Use of Sulphite of Soda in the Treatment of Erysipelas.

Dr. Addinell Hewson stated that he had been using the solution of sulphite of soda as a local application in erysipelas since February, 1864, and had obtained results from it, in the various forms of that disease, which were to him both interesting and surprising. He had been induced to try it from the representation made by Prof. Polli of its influence in destroying all diseases of a cryptogamic or animalcular origin—a source to which recent researches would lead us to suppose erysipelas was due. At first he administered it internally, in doses of ten grains every two hours, as well as applied it locally; but the effects of the local use were so prompt and decided that he has now abandoned its internal administration altogether. In extensive trials of this remedy, both in hospital and private practice, he has never seen it fail when thoroughly applied before the deep planes of cellular tissue had been invaded by the disease. Under the latter circumstance, no positive curative results were of course to be expected from its mere external use. But before such parts had become affected, a solution of ten grains of this salt to the ounce of water, when thoroughly applied on lint all over the surface affected, and to a considerable distance beyond it, and covered with oiled silk to prevent the evaporation of the solution, had not only produced a decided bleaching effect on the discolored surface in every such instance in the first twenty-four hours of its use, but had invariably destroyed all traces of the disease in forty-eight hours from its first application. The result was the same, whether the application was made in the traumatic or idiopathic form of the disease. He had thus cured twenty-seven cases, seven of which were of idiopathic erysipelas. Even in the cases where the deep planes of cellular tissue were involved as well as the surface, the disease on the surface was always apparently affected by the application. It was most positively bleached in all instances, and in many was evidently destroyed, within the period above stated, even whilst that in the deeper parts proceeded on steadily to suppuration.—*Trans. Coll. of Phys. of Philadelphia.*

Cereus Grandiflora in Affections of the Heart.

Dr. A. F. Potter, of Boston, recommends, in the *Med. and Surg. Journal* of that city, the cereus grandiflora, or night-blooming cereus, in affections of the heart. It is a sedative to the nervous and circulatory systems, and acts on the kidneys; given in the regular medicinal doses repeated at proper intervals, it is found to diminish the frequency of the pulse and increase the secretion from the urinary organs largely; it is hence of great service in dropsical diseases. In large doses it is irritant to the stomach, and has a peculiar effect upon the brain, producing mental confusion, hallucination, and slight delirium. In cases of an inflammatory nature, with acute symptoms, it is contra-indicated. It is indicated in chronic cases accompanied with anasarca, and in the condition of the heart which is generally associated with anæmia, and in which the tissue of the organ is enfeebled by defective nutrition, in combination with iron, mineral acids, and other tonics. An important incidental advantage in these cases is, frequently, its effect in removing the dropsical effusion, whether in the pericardium, the other serous cavities, or the general areolar tissue. Dr. POTTER has found it to act very favorably in palpitation, either from plethora, anæmia, or merely nervous disorder; but the remedy is applicable only to the cases in which the affection has a certain degree of permanency, and not at all to those occasional and fugitive attacks which occur under passing excitements.

The saturated tincture is preferred. Take of the fresh stem and flowers of the cactus four ounces, ninety-five per cent. alcohol, one pint, macerate for one month, and filter. Dose—from one to five drops three times a day, gradually increasing, if necessary, until unequivocal symptoms of its operation are manifested.

Dr. P. expresses his belief, that if the profession will test the virtues of the cactus, few would be willing to dispense with its use.

Chlorate of Potash in Phagedæna. By DR. E. TILLOT.

CHLORATE of potash has been employed for some years as an external application in ulcers, cancerous affections, and scorbutic gingivitis. It has been successfully used in the troublesome ulcerations following some blisters. It is daily used in the Hôpital des Enfans, in Paris, in the dressings of wounds covered with diphtheria. The chlorate may be used externally, either in solution, or as an ointment; in solution, in the proportion of ten to twelve grammes (a gramme is about fifteen grains) to six hundred grammes of water; as an ointment, two grammes to thirty of lard; and it may be mixed with glycerine. The mode of application differs according to the disease, and it may be by injection, lotion, or friction, once or twice a day. Dr. Tillot says that the chlorate has hitherto been very little employed in phagedæna, and as he has found it to produce a remarkable effect in this disease he thinks it interesting to communicate his experience of its effects. He relates six cases of phagedænic syphilitic disease, in most of which the chlorate was successfully employed; and he remarks that all the patients were free from constitutional cachexia, and were for the most part vigorous persons. In all of them the chancres were multiple, and belonged to the variety of *soft chancre.* The effects of the treatment were all manifested at the beginning of the medication; and although the contact of the chlorate was painful to bear, it was never so great as to compel its discontinuance. Its first effect, Dr. Tillot states, is to relieve the pains, when there are any; to diminish the intensity of the suppuration, and to modify its nature by changing the appearance of the morbid surface; but where it excels all other remedies is in its power of arresting the disease, in its spreading character. The action of the salt in phagedæna is not rapid, but it is constant.—*British and Foreign Medico-Chirurgical Review*, Oct. 1866, from *Bulletin Général de Thérapeutique*, March 30, 1866.

EDITORIAL.

Medical Education of Women.

It is a striking peculiarity of the present period, that woman is standing out boldly into the foreground, and asserting her own individuality. She asserts her right to have a voice in the politics of the nation, as she has interests to protect and aims to accomplish. She seeks to burst and throw aside the conventionalities and prejudices that have hedged her round about, and forced her to support existence limited to a certain narrow and circumscribed sphere. Women have distinguished themselves in many paths of usefulness, and in some occupations in which it was once thought none but the hardy and undaunted spirit of man could engage. Many of them are this day efficient practitioners of medicine, and some are teachers of medical science. Why should any one deny their capability and fitness, when that is proven to a demonstration? Why deny them the ability to correctly diagnose disease, when it has always been conceded that, outside of medicine, their quickness and keenness of perception are readily admitted to be more marked than even that of men; when their patients do well, whether the disease be correctly diagnosed or not; and when, in diseases peculiar to their sex, it would seem plausible that they should be able to become much more proficient than man ever could? Can any one answer how many female patients are visited by a physician in the proportion of one male? The number is relatively very large. Then why, except from selfish motives, seek to retain all that lucrative practice in our hands, that might and would naturally fall to the treatment of those of their own sex? Let the way for their thorough education in medical science be once opened, and there will be plenty eager and anxious to attempt any hardships necessary to be undergone, to make them thorough physicians. Let them hear the same lectures delivered to male students, either at the same time in the same building, certain lectures being delivered to each separately, or at another time in an institution of their own, and who will say that they will not be just as proficient, and as worthy to receive their diplomas at the last? If such be done, and they be graduated thus, they will be worthy of all confidence, and we will not hesitate to consult with them as freely on medical matters as with a professional brother. Now we know that all physicians are not equally capable, or intelligent, nor do *all* wish to be physicians, because *some* can; so I apprehend it would be with women. Only a *few* would have the desire, or feel that they would be able to be good physicians, and of these there would be different grades of intelligence. The occupation of physician would be to them an outlet into which those pent-up souls could find more expansion, and greater spheres for usefulness, and for the indulgence of that tender womanly sympathy belonging *only* to them, than in the drudging occupations of the needle, which were at one time about their only legitimate occupation. The State Medical Society, Allopathic, of Pennsylvania, has discussed the subject of counselling with well-qualified female practitioners, and in a report of the committee, appointed on the subject, by Dr. D. Francis Condié, the chairman, while acknowledging "the capability of the female mind to accomplish anything intellectually, that can be acquired by the male, at the same time it was strenuously opposed to encouraging females to devote themselves to this sphere of usefulness, unless only so far as to properly fit them for intelligent nursing of sick, with which the proper mission of woman in this direction was attained." It also suggested that since there were some "who would undertake the study and practice of medicine, and their services would be solicited by a large number of invalids, our duty to the community at large demanded that the profession should see that such females should have access to proper instruction." (Medical Record, April 1st, p. 61.) The report concluded with a resolution adverse to the repeal of the resolution of 1860 which prevents consultation with female practitioners. This is on a par with the old Allopathic intolerant spirit, that prevents their counselling with any physician, outside of their own ranks, be he ever so highly educated, or eminent in his profession. On one page of their journals they deplore the excess of ignorance and incapacity among their practitioners, and on another they wrap themselves in their ignorance and declare that there is nothing good beyond them, refusing the people the benefit that would result from the enlightenment of such ignorance from contact with those who could teach them something new.

American Improved Gas Light.

This valuable invention comes before the public at a time when the demand, "Give us more light!" is universal and imperative—when gas-bills have largely increased in amount, while the illumination from burners has been very sensibly diminished.

This discrepancy seems to have been everywhere observed, as well as the fact that the price of coal for making gas is very much less than it was a year ago. Interrogation crowds upon interrogation. "Why can such things be?" until the voices of a whole people unite in a common interrogatory execration of all connected with the business of supplying, through close corporations, the public with coal-gas in large quantities with little light. The rule is to make from ten to twelve thousand feet of what is called gas, from each ton of coal, which is sold in this city at from $25 to $35, and in many other places for a much larger sum, while the coke and other residual products about pay for the manufacture, and the interest on the necessary machinery for production.

To this must be added the government tax, which is paid by the consumer, rent of meters, deposit for meters, loss to consumer from unequal pressure and greatly varying illuminating power, which seldom reaches 12 candles at the burner. To the foregoing must be added the very limited and imperfect means of supply and distribution, from too small mains, and from the not generally known fact that all of the gas-pipes, including mains, service, and distribution, are gradually and constantly filling up with tarry impurities which will, in a comparatively short period, render necessary an expense of millions for renewal; a necessity which cannot be avoided, if the ordinary coal-gas continues to be used in its present imperfect state. These difficulties are so serious at the present moment in all the lower part of this city that it is almost impossible to obtain the necessary illuminating power, during the business hours of the evening, at any cost, with any ordinary size of burner. And the question "How can we obtain the necessary increase of light at a reasonable cost?" is being asked in every establishment where gas is used to any extent. Our answer to this question is, we have adopted the American Improved Gas Light, which enables us to use three-foot burners in the place of six-foot with an ample supply of light. We do this at a cost of not more than $1 per 1,000 feet for the increased illumination; and have used this light for months with entire satisfaction and success.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

AN ECLECTIC TREATISE ON THE DISEASES OF CHILDREN, By ROBERT S. NEWTON, M. D., Prof. of Surgery in the Eclectic Medical College of the City of New York, &c., and W. BYRD POWELL, M. D., formerly Prof. of Chemistry in the Medical College of Louisiana; Emeritus Prof. of Cerebral Physiology in the Eclectic Medical Institute of Cincinnati, &c.

THERE is no treatise on the subject of the work before us, that we have seen, that presents to us so many facts that are really unique and novel, and that are at the same time of such startling importance, as the present admirable treatise. The truths enunciated by Prof. Powell, concerning the incompatibility of some temperaments for the marriage relation, and the lamentable effect produced upon the children of such incompatible marriages, call for our serious attention. This is the more important to us, since the doctrine of the human temperaments is but little understood, and the laws with reference to the marriage relation are so often violated, producing wide-spread effects over the land; and as physicians we are expected to render safe against death those very children, who are really non-viable by the fault of their parents. The work is divided into three Books, the first of which treats of "physiological considerations in relation to parents, and the treatment of children." Book 2d gives the "natural history, pathology, and treatment of the various forms of disease incidental to infancy and childhood." Book 3d treats "of the functions and pathological relations of the cerebellum, and of the human temperaments, for the elucidation of disease."

Book 1st, chapter 1st, discusses the subject of "Parental conditions considered with reference to children." Section 1st on marriage eligibility—and sec. 2d on parental constitutions, are well worthy of consideration. In sec. 3d he says: "It is universally admitted, but not always avoided, that consanguineous marriages are gross violations of the laws of procreation. Physical deformity or mental inferiority is certain to appear in some of the descendants of such alliances." . . . . There is another alliance that frequently happens, which, if possible, is more objectionable than the consanguineous, so far as regards the immediate progeny, but not so far as concerns society at large; and for the reason that they do not live to propagate. We allude to the union of individuals of the same temperament, or constitution. We are now acquainted with intellectual, energetic, and healthy parents, whose children are all dead, or else possess so little stamina that they will not reach maturity. This law obtains with all the temperaments, except the sanguine, but more particularly with the triple and quadruple combinations. Chapter 2d, is on the influence of maternal conditions on the fœtus, and the author refers to the generally acknowledged psychological influence of the mother on the fœtus; while in section 2d, he alludes to "the influence of children on a mother by a first husband with reference to children by a second." He says: "The conclusion contended for under the circumstances is, that a mother's constitutional identity becomes merged in that of her first husband, and consequently her children by a second husband will not resemble their father, nor inherit his qualities necessarily, nor her own, but those of her first husband." Chapter 3d is on maternal duties in relation to her child. Chapter 4th treats of physical injuries to the child. Chapter 5th is on mental injuries to the child; and Chapters 6 and 7 give valuable hints on personal attention to the child, and the location and construction of the nursery. Chapter 8th refers to the causes of juvenile mortality—and Chapter 9th discusses thoroughly the question of its necessity and utility as a means of preventing deterioration of the race.

Book II. begins with pathological considerations and symptomatology, and then thoroughly discusses the theory of, and gives throughout the Eclectic treatment for, those diseases to which the infantile being is liable. The authors have handled the subject in a masterly manner, and one cannot arise from the study of that part relating to the cerebral and cerebro-spinal systems, or indeed from any other of the divisions, without confessing to having acquired some new ideas, and learned some new facts. This book is divided into two parts, the first of which refers to "manifestations of disease in the animal or cerebro-spinal system." It is subdivided into classes, orders, genera and species, and embraces diseases of the cerebral system; those of the spinal apparatus; of the respiratory system; of the circulatory system; of the derma; of the cellular system; of the organs of the external senses; and of the genital apparatus. Part

2d treats of "manifestations of disease in the vegetative system, including inflammatory and non-inflammatory diseases in the parts above the diaphragm, and in the apparatus below the diaphragm.

Book III. is an investigation into the functions and pathological relations of the cerebellum. He locates in it the organs of amativeness, muscular motion, and animal sensibility. The two latter organs Prof. Powell discovered, and located himself, and his arguments and proofs are, in themselves, quite convincing. Part 2d, treats of the human temperaments. There are on this subject a great many radical differences between the views of the learned professor, and those heretofore advanced by others. He defines "Temperament to be a mode of animal being, *sui generis*, compatible with life, health, and longevity." He divides them into four original or elementary temperaments: sanguine, bilious, lymphatic and encephalic, the first two of which are essentially vital, and the last two essentially non-vital. Their combinations increase the number of the temperaments to binary, six; ternary, four; and quaternary, one. The subject is one which the Professor has more fully developed elsewhere in a work on the Human Temperaments, and while it is one of vast importance, it is but little comprehended by the profession. It appeals to us constantly every day, in our experience, to observe and substantiate the facts, or controvert them.

The work is gotten up on good paper, in excellent type and style, is handsomely bound, with life-like portraits of both the authors—and contains 610 pages of letter-press.

NEWS AND MISCELLANY.

THE PUBLIC HEALTH.

The following is the report of Dr. Harris, of the Bureau of Vital Statistics, on the sanitary condition of New York and Brooklyn, for the week ending January 5:

METROPOLITAN BOARD OF HEALTH,
BUREAU OF VITAL STATISTICS, New York, January 8, 1867.

IN the week ending January 5 there were 463 deaths in New York, including 34 in the public institutions. In the previous week there were but 384 deaths, 44 of which were in public institutions. In Brooklyn there was no such increase of mortality, but, on the contrary, a decrease, the deaths in that city last week amounting to only 148, while in the previous week, ending December 29, there were 175. This arithmetic of mortality imparts instructive lessons when its sums are analyzed and its leading facts understood. The annual rate of mortality in these cities is, and for many years has been, too high to be disregarded by thoughtful men, though there are ample causes for these high death-rates. Chief among these causes is the unhygienic condition of the tenant-houses of the laboring and poor classes.

The fluctuations in the weekly records of mortality in New York are traceable mainly to the wretched condition of daily life in that half million of the population that have accepted the unventilated and crowded tenant-house as hopeless fate. The kinds of sickness which afflict those people increase in quantity and fatality as the biting cold drives them to shut every crevice where the fresh air entered during warmer days, and again in the hot season they must become the prey of putrid infections. In no other great cities with which we are in sanitary correspondence, save Liverpool, Dublin, and Glasgow, are the death-rates so variable, week by week. We mention this fact because of its practical significance when considered in connection with the weekly abstract of the causes and places of death. Last week the mortality in New York was equivalent to a yearly death-rate of 29.63 per 1,000 inhabitants (by census of 1865), and in the previous week it was as 25.91, exclusive of deaths in the island institutions. In Brooklyn the rates were as 30.7 and 22.61, respectively, the same weeks. The zymotic causes are charged with 26.4 and 21.16 per cent. of the total mortality in New York in the respectivo weeks. The first year of infancy gave nearly 24 per cent. and 23 per cent., respectively, of the total mortality. Scarlatina killed 64 children in New York and 20 in Brooklyn in the two weeks; typhus and typhoid fevers, 27 in New York and 9 in Brooklyn. Pulmonary diseases—272 persons in New York perished by these diseases the past two weeks. The mean temperature last week was 25° Fah., or 7° below freezing point; in the preceding week it was 31° Fah.

With the close of 1866 the mortality in the twelve months is summed up in the round numbers of 26,844. The reports now passing through the press tell all we accurately know of the causes of these deaths. Certain it is that neither the Board of Health nor the public press has covered anything from the free scrutiny of any one. It was an obvious duty to keep none of Death's doings hidden from the people. And now, lest the fearful sum of 26.844 may lead to a supposition that no improvement is made, we will here submit the monthly records of the last three months of each year for four years, including 1866:

	1863.	1864.	1865.	Average in previous three years.	1866.
October	1,818	1,749	2,087	1,918	1,762
November	1,853	1,803	1,728	1,796	1,981
December	1,996	1,752	1,572	1,773	1,895
Total deaths in the 3 months	5,767	5,309	5,387	5,487	5,638

Unless a great work of improvement is effected in the sanitary condition of tho common people in New York, the death-rate will continue to show that more than 500 lives are destroyed every month.

E. Harris.

Asthma.

BY H. E. FIRTH, M. D.

Treatment.—For the treatment of Asthma no routine course of practice can be recommended.

The causes of Asthma may be varied, and require treatment widely differing, both in its nature and therapeutic effect.

Yet for the relief of the spasm of Asthma I offer a remedy in tho following formula, which, from experience, I can with confidence recommend:

Without detailing different varieties of Asthma, or rather the varied causes producing the disease, I will at once give my treatment for ordinary spasmodic asthma. I do not know whence the formula below first originated, but it was procured by me from one Dr. Wm. Stewart of Philadelphia, about twenty years ago, and has since been employed by me and others with the most signal success. Care should be taken that the articles composing it should be of the best quality.

℞ English Valerian,
Scullcap Herb, āā ℥ ijss.
Skunk Cabbage, ℥ j.
Lobelia Herb, ʒ vj.
" Seeds, ʒ ij.

Make a saturated tincture; dose 1 tea-spoonful, sweetened, every 15 to 30 minutes until relieved.

If the pulse is full and hard, add to the tincture sufficient quantity of the tincture of veratrum viride to alter this condition of the circulation and assist more speedily in bringing the system under the influence of the medicine.

If the case is of long standing and severe, the following formula may be employed:

℞ Asthma Tinct.,
Syrup. Senegæ,
" Scillæ, āā ℥ j.
Tinct. Digitalis, ℥ ss.

One tea-spoonful every half hour until relieved, then 3 or 4 times each day.

The above will be found very useful in asthma depending upon organic diseases of the heart, or aorta.

The iodide of potassium is also good in some cases, and may be given in connection with the medicine in v. gr. doses, 3 times each day.

In those cases in which the nutritive functions are at fault, cod liver oil may be used conjointly with the medicine.

A fluid extract, made from the formula first given, with the addition of a small quantity of the tincture of veratrum viride, is one of the very best medicines I have ever used for the convulsions of children. Give in repeated doses until relieved. If not relieved in a short time, open the bowels freely; apply cold to the head, and cause the patient to inhale chloroform in a sufficient quantity to produce relaxation.

If there is not organic disease of the brain your patient will be relieved in very short time.

It is also beneficial in croup, and may be used in combination with the following articles:

℞ Syrup. Senegæ,
Syrup. Scillæ, āā ʒ vj.
Tinct. Sanguinariæ,
Asthma Tincture, āā ʒ j.
Tinct. Verat. Viridi, gtt. xij.

Sig. A half tea-spoonful every half hour or hour until relieved.

The tincture is an antispasmodic of the highest order, and may be useful in all diseases in which an antispasmodic is indicated.

100 Clermont Avenue, Brooklyn.

AMERICAN

ECLECTIC MEDICAL REVIEW;

A Monthly Record of Medicine

AND

THE COLLATERAL SCIENCES.

Vol. II. MAY, 1867. No. 12.

ORIGINAL COMMUNICATIONS.

Physiological Incest.

BY PROF. W. BYRD POWELL, M. D.

By the above title we designate Marriage in contravention of physical law.

The opinion is widely spread and deeply founded in the public mind that consanguine marriage deteriorates the species by entailing on progeny idiocy, such cerebral imperfections as result in insanity, and constitutions so depraved as to produce all the known forms of scrofulous disease. But statistics on both sides of the Atlantic have failed to sustain the truth of this very general opinion; on the contrary, they show that there are more of the evils complained of outside of the circles of consanguinity than within it, showing that the cause of the evils above named is more extensive than consanguine marriages. And of this character is a fact which was communicated to me a few weeks since, viz.: Dr. Patterson, Superintendent of the Ohio Idiotic Asylum, informs me that although he has been particular in his inquiries as to the progenitors of the idiots brought to the institution, yet he has succeeded in finding but two per cent.

of them to have had consanguine progenitors. This fact justifies the inference that an equal majority of idiots obtains outside of the influence of consanguinity in all of our other States, and, indeed, in all states and countries. This single fact is, in my opinion, sufficient to cast a shade of doubt upon the verity of the very prevalent opinion of consanguine influence on progeny.

Some fifteen years ago I was induced to suspect that a physiological incompatibility obtained between the sexes in relation to progeny, and it induced me to adopt an active and careful course of observation of progenitors and progeny, and the result has been an entire conviction of the truth of my suspicion. This incompatibility prevails extensively in society, and is, I am confident, the cause of all the idiocy, much of the insanity, all of the tubercular consumption of the lungs, and of mesenteric glands of the abdomen, and of all the scrofulous forms of disease incidental to the human race. This conviction induced me to denominate this incompatibility Physiological incest, *by which I mean, physiologically unlawful marriage.*

This physiological incest obtains thus: Certain of the human temperaments are incompatible in relation to progeny, and this view of the fact has, *a priori*, a much greater probability of truth in it than the assumed cause, viz.: consanguinity; because temperament is a positive condition, and therefore capable of being an agent; but consanguinity is merely a relation, and therefore incapable of agency. After a few explanatory remarks in relation to the temperaments, I will show how this incest obtains.

I adopt that system of the temperaments, with some modification, which has descended to us from the ancients, the one with which the public mind is most familiar. It comprises four temperaments, viz.: sanguine, bilious, lymphatic, and melancholic. The description given of the last so strongly indicates a diseased condition, and the fact that all the illustrations I ever saw of it being diseased subjects, caused me to discard it from the catalogue of temperaments, and I did the same with the so-called nervous temperament, and for the same reason; nevertheless, early in my investigation of the subject I became convinced that humanity was distinguished by four temperaments. And, after close and long-continued observation, I discovered what I deem to be the fourth temperament, and thirty years of additional observation have only confirmed me in the conviction that I did discover the fourth temperament, and I denominated it the encephalic.

A few words of explanation now become necessary. The sanguine and bilious temperaments constitute a *sine qua non* in the transmission of life and the perpetuity of the species. I infer, therefore, that they were originally founded in the constitution of the race, and hence I denominate them the vital temperaments. The lymphatic and encephalic temperaments I hold to be acquired conditions, to have resulted from influences incidental to civilization. They cannot transmit life, nor are they essential to life; hence I denominate them adjunctive temperaments. The two following laws, which have been deduced from an immense number of observations during a period of fifteen years, explain the rest:

1. The marriage of a person with another of the same temperament is incestuous.

2. When an adjunctive temperament enters into the constitution of both progenitors or parties to a marriage, it will be incestuous.

These two laws are sufficient to enable those who understand the temperaments to distinguish accurately all incestuous parties. Nevertheless, I will add a case or two that will illustrate both of them:

I. When both of the parties to a marriage have the sanguine encephalic temperament, their children will die young of dropsy of the brain, or of tubercular inflammation of its membranes.

II. When both of the parties to a marriage have the bilious encephalic temperament, their children will be idiotic.

III. When both of the parties to a marriage have the bilious encephalic lymphatic temperament, their children, in the proportions of 5 to 7 or 9 to 11, will be dead-born, and the others will not live two years, respectively. These three cases illustrate both laws.

I will now illustrate the second law exclusively:

IV. When one party is bilious lymphatic, and the other is sanguine bilious encephalic, their children will *all* die young of tubercular consumption of the lungs or abdominal glands, although neither of these forms of disease was ever in the ancestry of either party.

V. If one party be sanguine encephalic, and the other bilious lymphatic, the progeny will die young of tuberculous forms of disease.

VI. If one party be bilious encephalic, and the other sanguine encephalic bilious lymphatic, the children will sooner or later become insane.

In the three preceding illustrations the temperaments of the parties, respectively, are greatly different, yet as in each case both parties partake constitutionally of an adjunctive temperament, all the marriages are respectively incestuous.

A crude notion of the first law prevails extensively in this country; hence we hear it frequently said that a person in seeking a companion in marriage should select one who is as opposite to him or herself as possible; hence a bilious lymphatic, who has a full and rotund body, dark brown or black hair and eyes, with a dark, sallow complexion, sets out to look for a wife, and finds a lady of a lean, spare person, and so gaunt about the abdomen as to appear disembowelled, with light hair, fair skin and blue eyes. He is delighted in having found the right one, as he believes, because she is the opposite of himself as it is possible for one to be; he proposes marriage to her, and she, being influenced by the same notion, accepts of him, and then in six or seven years, or less time, they are greatly surprised that they cannot have a child to live five years. These parties constitute case V. There is an adjunctive temperament in both of them. This blunder is often made. I know of no means by which incestuous marriages can be avoided, except a knowledge of the temperaments. Ninety-five times in a hundred, young people in observing the first law violate the second.

Law 3. In all marriages with a view to or expectation of progeny, one of the parties should have an exclusively vital temperament, and then it is best that the other party should be more or less adjunctive.

1. Illustration: one party sanguine, the other bilious encephalic, or lymphatic, or bilio-encephalic lymphatic.

2. One party bilious, the other sanguine encephalic, or lymphatic or sanguino-encephalic lymphatic.

3. One party sanguine bilious, the other sanguine lymphatic or bilious lymphatic, sanguine or bilious encephalic, or bilio-encephalic lymphatic.

These are all good marriages.

Laryngitis.*

BY ROBERT S. NEWTON, M. D.,

Prof. of Surgery in the Eclectic Medical College of the City of New York.

UNDER the above head are four varieties: 1. Mucous Laryngitis; 2. Sub-mucous Laryngitis; 3. Pseudo-membranous Laryngitis; 4. Spasmodic Laryngitis.

MUCOUS LARYNGITIS.

This is an erythematic inflammation of the mucous membrane of the larynx, which is frequently met with in children of advanced age; but no age is exempt from it. It sometimes exists alone, but frequently follows coryza, and frequently arises in the course of scarlatina, variola, etc. It is not uncommon for it to descend and involve the trachea and bronchia, but more frequently extends upward to the fauces, and sometimes invades all. By looking into the fauces, the velum, uvula, and fauces are found always red.

---

* This is a chapter from the new edition of Newton & Powell's Eclectic Practice of Medicine.

The progress of this disease is usually rapid, but its symptoms are frequently obscure at first; the patient, however, will always be found manifesting more irritability and restlessness than would be expected from the existing signs of disease.

In infancy, the cry is sufficient to diagnose the disease when it is violent. It is frequently so faint as scarcely to be heard in acute attacks, but becomes more distinct as the inflammation lessens. This inflammation, even in its mildest form, is attended with an abundant secretion of mucus, which at first is clear and thin, but it soon becomes thick and yellow.

This disease is frequently so mild as to attract but little attention, and even this mild form of it is apt to destroy all audible voice, a whisper is the loudest sound the patient can make; in infants, the cry may be similarly affected. But the helplessness of infants renders the disease, however, more dangerous to them, because of the mucous accumulations, which they cannot readily throw off.

Some degree of fever usually attends this disease, and it may appear simultaneously with the other symptoms, or not until they have appeared. It usually runs its course in five or six days, terminating in resolution, the secretion of mucus, or it may pass into the chronic state.

SUB-MUCOUS LARYNGITIS.

This is said to be the disease of which General Washington died. This circumstance not only distinguishes it, but gives it, almost, a diagnostic character.

Sub-mucous laryngitis is more common to adults than to children; it is only a violent stage of the mucous or erythematic variety. Some of the symptoms, such, for example, as commencing with a chill, which is followed by fever, attended with alternating sensations of chilliness and heat, would seem to indicate a disease of a more extensive invasion and consequently of more danger.

That an erythematic inflammation can be mild or violent, is not a matter of doubt, but when it leaves its proper residence, the surface, and seizes upon a sub-tissue, it is no longer the same form of disease; consequently if the submucous tissue of the larynx constitute a part of this affection, it is not simply an inflammation of the mucous surface, though it may have been originally. We do, then, regard this as an essentially different form of disease, although an observance of the distinction may be of no diagnostic or therapeutic importance.

That there is not more than one or two per centum of fatal cases in the previous disease, is very probable, and if there be less than fifty in this, it is not so violent as we think it to be. We speak with reference to that kind of practice which General Washington had the misfortune to have. Many cases supposed to be of the previous variety, which terminated fatally, may really have passed into this, and effected the mischief; but to us, it is more probable that laryngeal accumulations of mucus did the mischief, because both varieties appear to maintain an independent consistency from beginning to end.

Among the first symptoms is sore throat, with difficult and painful deglutition. These symptoms should always excite alarm, unless we are satisfied that the inflamed condition of the fauces is sufficient to explain the full extent of the symptom, which it cannot do, when it is occasioned, mostly, by an inflammation of the epiglottis.

The function of expiration is perhaps always easy, but that of inspiration is exceedingly painful and difficult, because of the inflamed and swollen condition of the membrane of the glottis, which causes it to close against the entrance of the air, consequently the acts of inspiration are greatly prolonged and attended with a whistling, wheezing sound, as though the air were drawn through a reed.

When the air passage is very narrow, the tumefaction of the mucous and sub-mucous tissues may produce suffocation, and then we have added to the phenomena which usually follow such an event, the facial expression of great pain and suffering.

In this disease, the epiglottis sometimes becomes so inflamed and swollen as to become incapable of a normal adaptation to the glottis, whereby particles of substances, in the process of deglutition, obtain access to the larynx, and produce intense irritation, which is succeeded by paroxysmal coughing and a painful difficulty of breathing.

In this stage of the disease, the patient is exceedingly restless and distressed, never able to sleep but a few minutes at a time, so urgent are the demands for fresh air; the system begins to show signs of insufficient oxygenation—the surface becomes cool; the pulse becomes small, frequent, and feeble; the lips bluish; the face livid, and, in the respiratory efforts, the shoulders rise, the chest heaves, the skin becomes covered with a clammy, cold sweat, and then succeed delirium, coma, and death.

But death does not always come on thus gradually—life is sometimes suddenly arrested by a complete closure of the air-passage to the windpipe; but without this event, so rapid is the course of the disease sometimes, that death may supervene at any time between seven or eight hours and three or four days; and yet, when the attack is mild and slowly progressive, it may continue three or four weeks, and then terminate in death, in resolution, in the chronic form, or by serous effusion into the sub-mucous tissue, and thus death may result from a recuperative process of the system, and it may not—depending entirely upon the extent of the effusion.

Diagnosis.—Constitutional results, resembling those of laryngitis, do sometimes attend manifestations of disease in the chest; but still, we cannot consider it as scarcely possible that either can be mistaken for the other. The seat of the pain, the change of voice, and the peculiar cough should always distinguish laryngitis from pectoral affections.

Treatment.—The treatment of the mucous and submucous forms of laryngitis will be similar; it should be commenced with a mild emetic, as the Compound Tincture of Lobelia; after which, some slightly stimulating liniment should be applied to the neck and throat, two or three times a day, followed by the application of cloths wet with warm water, or a warm fomentation around the throat. The feet and legs should be placed in a vessel of warm lye-water for ten or fifteen minutes, and which may be repeated daily, or even twice a day. Expectorants must be administered, such as the Compound Tincture of Lobelia, in small doses, repeated several times a day; or,

℞ Syrup of Squills,
Syrup of Senega, *āā* ℥j;
Camphorated Tinct. of Opium, ʒij;
Tinct. of Lobelia, ʒj. Mix.

Of this give half a teaspoonful every half hour until slight nausea is obtained.

The warm vapor of vinegar should be inhaled several times a day. The bowels should be kept open by laxatives, and if there be much febrile disturbance, the Veratrum, Gelseminum and Asclepius should be given freely until the febrile reaction is controlled, and free diaphoresis is established.

When these two forms of disease become more active, and consequently more serious, they demand a prompt and energetic course—the emetic may be repeated daily for several days; diaphoresis should be constantly kept up, and some rubefacient applied to the back of the neck and between the shoulders.

The room should be kept warm, being careful not to allow a current of cool air to pass over the patient. If this is neglected, death may follow in a few minutes.

The use of a gargle composed of an infusion of equal parts of Hydrastis Canadensis, Myrica Cerifera, and common salt, to half a pint of which may be added a drachm of black pepper and two ounces of vinegar;—the throat may be gargled with this four or five times a day.

After the severe inflammatory symptoms have subsided, leaving a troublesome cough with irritation of the fauces, glottis, etc., the following compound will prove very beneficial:

℞ Comp. Syr. Stillingia, ℥ j;
Comp. Syr. Helianthus, ℥ iv;
Tr. Opii. Camph. ʒ j. Mix.

Take a tablespoonful of this compound several times a day, when the cough is very troublesome.

As we referred to the case of General Washington in the beginning of this disease, we will now give a complete history of the same, from which will be seen with what a certainty has the allopathic heroism in practice made the old soldier, the statesman, the patriot, and millions of human beings, bow to its power.

General Washington's Case and Death.—“ I shall here give in illustration the observations on the medical treatment of General Washington's last illness, by John Reid, M. D., physician to the Finsbury English Dispensary, and Professor of Theory and Practice of Physic.

“ In reading the official report of the death of General Washington, as stated in the newspapers, &c., I should imagine there were few medical persons who do not feel astonished at the extraordinary manner in which that great man was treated by his physicians during his last and fatal indisposition.

“ ‘ Some time in the night of the 13th of December, it is said, the General was seized by a disease called the cynanche trachealis (croup). During the same night he sent for a bleeder, who took from him twelve or fourteen ounces of blood. Next morning a physician was sent for, who arrived at Mount Vernon at eleven o'clock; when imagining danger in the case, he advised the calling of two consulting physicians. In the interval, however, he thought proper to employ, in spite of the twelve ounces that had already been expended, two copious bleedings. Now when we consider that these are called *copious*, and the other is not noticed as such, and all indifference with which a future *most copious* bleeding is afterward mentioned, we may presume that each of these was twenty-five or twenty ounces at least.

“ ‘ After this, “ two moderate doses of calomel were ad ministered." I know not exactly what an American moderate dose of calomel may be, but if it is fair to presume it to be in proportion to the bleedings, we may conclude that it was at least very considerable.

"'Upon the arrival of the first consulting physician, it was agreed that, as there were no signs of accumulation in the bronchial vessels of the lungs, they should try another bleeding.

"'Now this appears to be perfectly inexplicable. As there were at present no signs of accumulation in the lungs, they were driven to another bleeding. Hence it will be seen, that this last bleeding was to produce an accumulation in the bronchial vessels of the lungs. There was great difficulty of breathing, great inflammation; but as there was as yet no accumulation in the lungs, they were determined to induce that also; and, as a likely means of inducing it, had recourse to the most extravagant effusion of blood.

"'This is not an unfair interpretation of their words; but it could not have been their real meaning; their real meaning it is impossible to discover. In addition to all their previous venesections, thirty-two ounces are now drawn. The medical reader will not be surprised to find that this was unattended by any apparent alienation of the disease.

"'In the next place, vapors of vinegar and water are frequently inhaled. Two doses of calomel were already given; but this not being deemed sufficient, ten grains of calomel are added—nor is even this sufficient. Repeated doses of emetic tartar, amounting in all to five or six grains, are now administered. It is said that the powers of life now seemed to yield to the force of the disorder. To many it may appear that the yielding of the vital principle, in these circumstances, was not altogether owing to the force of the disorder.

"'The patient lying in this feeble and nearly exhausted state, is to be still further tormented.

"'Blisters were next applied to his extremities, together with a cataplasm of bran and vinegar to his throat. It is observed that speaking, which was painful from the beginning, now became scarcely practicable. When we reflect upon the extreme weakness to which the patient must by this time be reduced; and that he had both a blister and a cataplasm of bran and vinegar to his throat, can we wonder that speaking would be scarcely practicable, respiration grow more and more contracted and imperfect, until after eleven o'clock at night he expired without a struggle.

"'Think of a man being within the short space of little more than twelve hours deprived of *eighty or ninety ounces of blood;* afterward swallowing two *moderate* doses of calomel, which were accompanied by an injection; then five grains of calomel and five or six grains of emetic tartar; vapors of vinegar and water frequently inhaled; blisters applied to his extremities; a cataplasm of bran and vinegar applied to his throat, upon which a blister had already been fixed; is it surprising that when thus treated, the afflicted General, after various ineffectual struggles for utterance, at length articulated a desire that he might be allowed to die without interruption?

"'To have resisted the fatal operation of such herculean remedies, one would imagine that the venerable old man ought at least have retained the vigor of his earliest youth.'"
—*American Practice.*

PSEUDO-MEMBRANOUS LARYNGITIS—CROUP.

This is an inflammation, essentially of the larynx, but it may extend through the trachea, and even into the bronchia, and, according to some writers, even into the bronchial cells. It is attended by the rapid formation of a pellicular concretion, which is spread over the walls of the larynx, and, in some cases, lines the trachea and extends into the bronchia. Before the production of this pseudo or pellicular membrane, the mucous membrane is always much inflamed, red, and gorged with blood; the sub-mucous tissue also participates in the injection, and when the inflamed membrane is at the same time the seat of sanguineous exhalation, this exhalation is seen to be accompanied, or followed, by the concretion before named.

From these circumstances, it may be inferred, that croup is a catarrhal inflammation, or holds some striking affinities with it, and the blood, normally destined for mucous secretion, becomes plastic by the inflammation, and thereby imparts to the mucus a portion of its fibrin, and hence, by concretion, comes the pseudo-membrane that distinguishes this modification of disease.

All agree that it is not a disease incidental to the earliest periods of life, and yet, essentially a disease of youth, or early life, most frequently occurring between the ages of two and five years, sometimes younger, sometimes older, and among adults in the ratio of about one-tenth of one per cent.

In the commencement, the symptoms are precisely like those of catarrhal croup, and so they continue, until the voice begins to become whispering and the cough husky; up to this time, it is possible that there is only an engorgement of the respiratory passages, with a high state of irritation—the existence of inflammation is barely possible, at all events, no exudation has taken place. If the disease do not begin in the larynx, the introductory cough may, in no wise, differ from a common catarrhal one, and the voice may be equally of the same character; but after a while, the voice sinks to a whisper, and no efforts of the patient can raise it; from sonorousness it becomes husky and apparently stifled in the throat, and appears in paroxysms;—following the cough, the inspirations are short and whistling.

Sometimes the disease begins in the bronchia, and then the introductory symptoms are those of bronchitis; sometimes its outset is in or about the fauces, and then the symptoms are catarrhal, and attended with sore throat and more or less painful deglutition, hoarseness being the first indication of an invasion of the larynx.*

---

*It is said that the colds or catarrhs of children are never attended with hoarseness. If this be true, and we believe that Cheyne is the au-

But no matter where the disease began, the breathing at length becomes labored, and sounds as though it were passing through a contracted and unyielding surface.

All audible voice now becomes extinct, and any effort to speak produces paroxysms of a low and smothered cough, with pain in the throat and superior portion of the thorax; an anxious expression of impending suffocation covers the face; the disposition is restless; the features are swollen and darkened, the breathing very difficult, and the extremities cold. Sooner or later the paroxysm relaxes—the patient obtains some rest; but before his wearied system becomes refreshed, he is roused by another paroxysm of probably increased violence—the respiration is hurried to three or four times its normal standard.

Sooner or later in the disease, febrile action sets in, and aways in the ratio of the other symptoms; sometimes it appears at the very onset, and runs high.

Between this disease and laryngitis proper, there is this analogy: both run their course rapidly, proving fatal sometimes in twenty-four hours, but more frequently in forty-eight; and then, again, it may continue five or six days.

Upon the event of a favorable turn in the disease, the cough changes and sounds as if something had become loose in the trachea, and with this change there is a general mitigation of all the symptoms; the coughing brings up viscid mucus, sometimes patches, strips, and even tubes of the pseudo-membranous concretion. Finally, this membranous matter is either absorbed or discharged, and the patient recovers.

But, on the contrary, should no change have been manifested for the better, the sonorous and wheezing respiration will become so increased, as to be heard to a considerable distance—every muscle that can aid the respiratory function is brought into requisition, the arms are spread asunder, the head is thrown back, the nostrils are extended, the chest drawn up, and the facial expression tells that it is all for

thority, parents should give particular attention to it—it will give them a timely admonition of the impending danger.

breath—every expression of agony is impressed upon it, and it is manifested through every muscle of the chest and neck—the skin becomes cold and clammy, the pulse increases in quickness and feebleness, the lips become livid, the face cold and pale, the brain, not being reinforced by properly oxygenized blood, ceases to superintend the struggles for relief, and the curtain of stupor or drowsiness drops before the scene, or it rallies the remaining elements of life into a last effort, which results in convulsions and death.

It is not, however, always the case that the patient is permitted to struggle while there is strength, for life is frequently cut short by suffocation.

When the cry is so changed that the reprise portion of it can only be heard, and when heard, it is acute and sudden, like the crowing of a young cock, and when the voice is lost, we may safely conclude that croup is present.

CAUSES.—Croup is much more common to northern than to temperate and southern latitudes—much more common in dry, cold weather, with northern winds, than in any other ; more common to a sea-coast, lake, or river situation than to interior ones.

It is now generally admitted, that not less than one-half of all the cases which obtain in cold latitudes, terminate fatally.

It is more frequently met with in males than females, and with sanguine lymphatic, sanguine-bilious lymphatic, and sanguine encephalo-lymphatic temperaments than others.

DIAGNOSIS.—Spasmodic, cerebral, or catarrhal laryngitis or croup, is the only form of disease with which pseudo-membranous laryngitis or croup can be confounded, and between these the diagnosis is so well marked that such a mistake should never be committed. This form of disease comes on slowly, more or less like a common catarrh ; that, the spasmodic, attacks suddenly, and is but rarely, if ever, preceded by catarrhal symptoms. The former may appear suddenly, in some instances, but then its character is so essentially febrile, while the latter is not, that they need not to be confounded.

Febrile intermissions never attend the former, except occasionally after vomiting; but complete intermissions do attend the latter—remissions only characterize the former. The stridulous sound of the cough and inspiration so peculiar to the former, is absent in the spasmodic form. In the former, the pulse is excited and irritated, generally quick, tense, frequent, and full, with an increased or febrile elevation of the cutaneous temperature; but, in the latter, the pulse is small and contracted, and the cutaneous temperature continues natural.

Prognosis.—This form of croup is always to be regarded as dangerous, and the extent of the danger is always indicated by the violence of the inflammation;—its danger, furthermore, as a general fact, is in proportion to the suddenness of the attack.

At one time a majority of the cases of this form of croup terminated fatally—it is still attended with much fatality, and necessarily must be so long as fever and inflammation are treated as forms of disease—so long as the idea of sustaining vital energies consists in breaking them down by too active medication.

Treatment.—We are required, in aiding nature in this form of disease, to relax the constricted or spasmed organs—the skin is in this condition, as indicated by its heated and febrile condition. In the second place, we are required to strengthen the debilitated organs, which are the larynx and probably the trachea, for otherwise, they would not have become the seat of obstruction or disease, and as a proof of the fact, they are highly excited and labor under an excessive action.

To meet the first indication, an emetic should be promptly administered, and which should be as promptly repeated, as often as the peculiar croupy inspiration occurs; and the most efficacious articles that can be used for this purpose, are the Compound Tincture of Lobelia, or the Acetous Emetic Tincture. After having produced free emesis, either of these tinctures must be continued in doses sufficient to produce expectoration, and in severe cases, even nausea. Hot water should be applied to the throat constantly, and the skin should be thoroughly cleansed, and as far as possible relaxed by the warm lye-wash.

In the mean time, or as soon as cutaneous relaxation shall have been effected, the second indication should be attended to. For this purpose, Cayenne or Mustard poultices should be applied to the extremities and the neck, or as near to the weakened parts as possible.

Half a drop of the Oil of Stillingia, placed upon the tongue, has in the practice of several Eclectic physicians, as well as in our own, rendered immediate relief, and ultimately, by its repetition, cured cases of this disease, which had absolutely resisted all previous treatment, and the cases were supposed beyond the influence of medication—thus fulfilling all the indications claimed to be produced by the employment of calomel at the hands of the old-school physicians. We have also found it beneficial, when applied externally, in the form of a liniment :

℞ Oil of Stillingia, ʒ j ;
Oil of Lobelia, ʒ ij ;
Alcohol, ℥ vj. Mix.

The throat, neck, and chest must be bathed with this three or four times a day ; and after each application, a fomentation should be applied, composed of two parts of Hops, one part of Lobelia, with equal parts of vinegar and water ; boil together, and apply the herbs.

Bleeding and purging are quite universally practised in the treatment of such forms of disease as produce inflammation, for their removal, and we have, in several instances, intimated that both are enfeebling or prostrating—destructive of the vital forces, while neither of them is depurating and consequently neither of them can be properly indicated in the removal of disease, because disease most frequently has its origin in defective depuration.

According to these views, and we hold them to be sound, we should direct our efforts to the renal and cutaneous secretions first, and then to those of the glandular system in general. The bowels, therefore, claim our attention no further than to see that their accumulations do not become a source of irritation.

Although we regard proper external applications to the neck as being of much service, by relieving the part of much of its capillary congestion, yet we should not neglect the use of stimulating gargles, such as the one recommended in the mucous forms of laryngitis.

It often happens that when the croupy symptoms have been relieved, the evidences of constitutional irritation still exist; in such cases, we may safely suspect that the liver, and probably other glands, have not resumed their proper functions. In such cases we may have recourse to aperient and stimulating alteratives.

SPASMODIC LARYNGITIS—FALSE CROUP, CATARRHAL CROUP.

This form of disease is never attended with the production of a deciduous or pseudo-membrane in any portion of the respiratory passages.

Symptoms.—The initiatory usually consists of such catarrhal symptoms as coryza, suffusion of the eyes, chilly sensations succeeded by those of heat, some hoarseness, and cough.

These symptoms may continue for several days, or only for twenty-four or forty-eight hours, without much modification, which usually occurs at night and during sleep, consisting of the strongest indications of impending suffocation; such as cough and dyspnœa, with struggles of the muscular system in aid of the respiratory function.

Sometimes it is introduced by a croupy cough, some fever, and hoarseness, which may continue a few hours or even days, before the arrival of a paroxysm such as above described. The paroxysms, as they obtain in different cases, present two great extremes: in some cases they are quite mild, and excite no particular fears—in others, they are so violent as to produce the strongest apprehensions of immediate suffocation. Between these extremes every grade or degree of violence will be observed in practice.

During a paroxysm, the face is forced into those conditions and expressions which mark a case of strangulation—it is swelled, of a violet or dark-red hue, the eyes are humid and projected in their orbits, the expression of the face is anxious, the respiration is hissing and protracted, the voice is reduced, but never to a whisper, the surface is hot, the pulse quick, and the cough, if present, which occurs at intervals, is hoarse. These are the usual phenomena of a paroxysm, and when concluded, sleep ensues.

A single paroxysm may terminate the disease; at all events, the patient will only be troubled with hoarseness and a dry, barking cough until the next night, when, if the disease has not terminated, the patient will have another paroxysm, possibly two, and thus the disease continues to its close, with one or two paroxysms per night.

In some cases, however, the paroxysms recur more frequently, and each one is characterized by more violence than the preceding, until finally a greater degree of violence becomes incompatible with life, and death, by asphyxia, closes the scene.

But in the midst of a paroxysm a change for the better may supervene, and when it does, it is usually indicated by signs of secretion, as a loose cough, and the throwing up of some mucus; the violence of the symptoms is mitigated, the cough loses its harsh ring, the inspiratory sounds have a mucous character, the croupy and febrile symptoms disappear, and between three or four days and two weeks, the patient is well.

But, instead of a favorable turn, additional and more exhausting symptoms may appear, as great restlessness, nausea, and vomiting, followed by a small, frequent, and vanishing pulse, cold extremities, clammy sweats, coma, and death.

Predisposing Causes.—However difficult it may be to determine, precisely, the pathological differences between the several forms of laryngitis over which we have passed, the diagnosis, in general, is quite unmistakable. When we consider the fact that they are all more or less inflammatory and involve the same parts, it would seem possible, and even probable, that catarrh might be provoked into the mucous laryngitis, and that the milder forms of this might likewise be converted into the more severe; and yet we have no reliable evidence that they do thus merge into each other.

Croupal symptoms and pseudo-membranous concretions are sometimes occasioned by scarlatina, but we have not, from any writer, learned that spasmodic laryngitis is ever produced in the same manner; and if it be not, then this circumstance adds to the evidence that croup and pseudo-croup are not different degrees of the same form of disease —that they are not varieties of the same species. From what we have been able to learn, we deem it to be as impossible for one form to pass into the other, as it is for catarrh, in early infancy, to pass into croup.

Exciting Causes.—These are usually such as occasion catarrh—such as an improper or unprotected exposure to a cold and damp atmosphere, or sudden atmospheric changes.

This form of croup is liable to a frequent recurrence—as frequent as may be the exposures to the causes that usually produce it. All the forms of laryngitis may be regarded as being produced by the ordinary causes of catarrh.

Diagnosis.—The diagnosis between the two forms of croup we have given under the head of pseudo-membranous croup, and therefore, in this place, we will barely add, that the seat of the pain, the change of the voice, and the peculiarity of the cough should always distinguish both forms of croup from all pectoral forms of disease.

Prognosis.—All the forms of laryngitis must be regarded as dangerous, if permitted to run their own course, but this form is much less dangerous than the pseudo-membranous, and therefore it may be regarded as generally favorable; and yet, when prolonged beyond the third day, and is still increasing in violence, and more especially when attended by nausea and vomiting, an unfavorable termination may be expected.

Treatment.—When the affection is characterized by much inflammation, the treatment recommended for pseudo-membranous croup should be adopted, only modifying to suit a lower grade of action.

American Eclecticism—Its History, Utility, and Destiny.*

BY J. W. JOHNSON, M. D.

The term *Eclectic*, as applied to medicine, signifies to select from each and every system of medical practice, and from all sources whatsoever, the best remedies or agents, or such as are so regarded by the exercise of sound judgment, aided by intelligence, experience, and observation; and make a correct and therapeutical application of them in the treatment of disease. In thus defining Eclecticism as applied to medicine, I am not aware that I entirely agree with Webster or other lexicographers, who give a general definition of the term, as applied to medicine, literature, and the various departments of science and arts, theology, &c. Theories promulgated, doctrines enunciated, are subject to the discriminating and sifting action of Eclecticism. Truth *alone is unchangeable*, and the severest scrutiny will fail to discover any field for the exercise of this power. But especially in all matters pertaining to or affecting the welfare of the human family, and more especially of life and health, the exercise of this prerogative is commendable, and may well be employed. But one is ready to inquire, How is it possible to base a system of medicine upon such a nomenclature? it being generally conceded that names to a certain extent are arbitrary and unmeaning, while it is as generally admitted that principles, enunciated and practised, exercise a wielding power, for good or evil—for weal or woe. We reply, the *name* we inscribe upon our banner gives us a distinctive organization, and forms for us the basis of a system of medical practice, which we claim has merited, and still lays claim for a portion of the favorable consideration of the community. While the peculiarity of our system depends mainly upon therepeutics, or the remedial department, yet in some forms of disease, we hold a difference in views in pathology, as febrile and inflammatory diseases, &c. Another may be led to inquire, if all physicians are not eclectic in their practice, choosing such remedies as their judgment shall pronounce the best. To this inquiry we can only say that, to a certain extent, this may be true ; and we shall be likely to find that eclectic or judicious selections are more likely to be exercised by medical men of large experience, or who are advanced in medical life ; for the casual observer cannot fail to have discovered the strong tendency of all medical men in their early practice, after finishing their regular course of medical studies, to base their practice chiefly upon book-knowledge, collegiate and clinical instruction ; and hence, not until after the lapse of several years, will the physician be likely to bring to his aid in practice an intelligent, enlightened, and sound judgment. I believe it to be a well-conceded fact that young physicians, who have but just emerged from their studies, and commenced practice, usually rely to a far greater extent upon *formulas* and pharmacological works than after years of medical experience ; and besides, as general observation and facts will show, exhibit more confidence in their skill, and display more medical wisdom, than after mature observation and experience in the art. There is also in the medical field a strong tendency to become *routinists ;* prescribing "for *ever and a day*" the same class of remedies for certain diseases. So strong is this habit with many physicians that the pharmaceutist can frequently tell at a glance the author of the prescription which he is called upon to dispense. While this practice is to a certain extent judicious, nevertheless it fails to show on the part of the medical man any considerable amount of scientific medical investigation. It evinces a limited amount of therapeutical knowledge, and, as a practice to any considerable extent on the part of the medical man, may be considered reprehensible.

---

* Address of the President of the Connecticut Eclectic Medical Association, at the Annual meeting at Hartford, Ct., May 14th, 1867.

Eclecticism in medicine, or, as it has been justly termed, the *American System of Liberal Medicine*, unfolds to its votaries the broad fields of nature and science, and allows them to glean from every and all sources those remedial agents which their judgment pronounces superior, or adapted to the peculiar condition of the pathological or diseased action with which he has to contend; and while it usually discards the mercurials, antimonials, arsenicals, general phlebotomy and many other of the deleterious and potent inorganic and organic agents, frequently relied upon by our Allopathic friends, yet all of these agents, by the broad principles by which we are governed, are within our reach, and may be called to our aid if in our judgment they are indicated.

Says an able writer: "What Eclecticism is, superficially or in form, is not so difficult a matter for us to determine; for its history is within the scope of our memories."* What is philosophically, is perhaps a far more important question it for us to consider. We believe there has been no time in the whole history of medicine, but has shown large, and, many times, glaring defects, in that science—and in *too* many instances an overbearing and intolerant spirit on the part of its cultivators. The science has been shrouded in mystery, and the practice of it has, in all ages, tended to a severity which, in the treatment of many diseases, has materially endangered human life, to say nothing of injured systems and shattered constitutions. A few men of quick discernment have at all times protested against this mysticism and this severity, and have contended for a greater simplicity, and a greater reliance upon the innocuous organic agents which grow out of the earth broadcast, on every hill and in every valley of the great domain of the universe. They have also protested against the universal practice of shrouding in mystery the healing art; urging the necessity of disrobing the science of many of its technicalities, which greatly retard the general diffusion of physiology and the other collateral branches of the healing art among the masses; for it cannot be denied that a *general* (not to say *minute*) knowledge of the science can safely be trusted to the great mass of the people; for in the possession of this knowledge a vast amount of disease and suffering might be prevented by the adoption of prophylactic or preventive means.

---

*Having its origin in the great mind of a noble son of the Granite State, of massive intellect, of native talents, and originality almost if not quite unsurpassed in the history of noble pioneers.

We believe that a greater simplicity in the practice of the healing art would ensure more favorable results, and leave the system unexposed to the almost innumerable ailments which have ever attended the harsher means of medication. Perhaps at no time had medical despotism been more despotic than at the period when Eclecticism sprang into existence—and at no time previous had there been so universal an expression of professional dissatisfaction, by the springing up of new systems, as they were called; and a retrospective glance will satisfy any reasonable man that it was a glorious thought, the bringing together all these systems, new and old, to compare, to select from them those facts and agents, which common sense and an enlightened and successful experience alike seemed to indicate, as well as to reject those whose tendency was manifestly and certainly injurious. It is needless to say this was the origin of the American Eclectic system of medicine, and that it has been eminently successful, and has continued to work and win its way, until it has now advocates in every section of the Western, and in many parts of the Eastern world. The internal life—the vital principle which animates it—and which is to promulgate its principles, and, if properly conducted, is sure to urge it to a certain triumph, should not for a moment be lost sight of by its advocates. As will be supposed, our therapeutic department furnishes a wide, and some will be ready to affirm, a distinctive, difference from that of the other systems which prevail at the present day. As we have before remarked, we reject mercurials and some other agents frequently employed, believing them to be deleterious, but have added largely to the Materia Medica by the introduction of Podophyllin, Leptandrin, Hydrastin, and 70 or 80 other active principles of valuable vegetable remedies which contain the remedial virtues in concentration. So generally diffused and highly valued are these agents, that they have become a staple article of traffic by the druggists, and have been adopted to a considerable extent by all classes of physicians. Podophyllin, the active principle of the Mandrake—a remedy of great power and potency, exerting a marked action upon the biliary secretions, and answering all the indications sought from the employment of mercurials, a remedy of power, yet leaving no baneful effects upon the system after its employment—bids fair to entirely supplant the "*Samson of the Materia Medica*," or mercury—producing all the beneficial action, and none of the injurious effects of that agent. But the remedial department does not constitute all the difference existing between the system we advocate and others in vogue at the present day. And while it is a matter of rejoicing and exultation that we have added so largely to the Materia Medica, and that we have at hand so large and valuable a class of agents to combat disease, yet we claim a difference in our views of pathology in some forms of disease, particularly those of an inflammatory character. We are told daily that our views of pathology do not differ materially, nor our application of physiological truths to the investigation of pathology, and that it is only in *therapeutics* that we mark out a course for ourselves. Let us inquire, is such the fact? Indeed, would such a difference be sufficient, or a suitable one, on which to base a superstructure of medicine, a fabric *honorable*, *honored*, or *lasting*. Therapeutics may be truly considered important in the science and practice of the healing art; but we must admit that they are, and ever have been changing—and, indeed, it may be but a short time before we shall come together in therapeutics upon some common ground—the result of which would be to lose our identities. Says an able writer, "Is there indeed no distinction or characteristic difference, except that pertaining to therapeutics? Can we not so embody the spirit of reform and progress in medicine, as ever to keep us far in advance of the progress of exclusivism, as we believe ourselves to be now?" If we would extend our principles, push onward the car of liberal medicine, we must divest ourselves of that accursed spirit of extreme selfishness, of radical exclusiveness; have no fellowship with that pharisaical spirit which exclaims, "Stand one side, I am holier than thou!" We must cultivate a friendly interchange of sentiment and brotherly feeling. Indeed, if we would honor our cause we must erect an edifice in medicine which encourages free and expansive thought, the most exalted and the most progressive action, as well as an entire deliverance from every oppressive thraldom and prejudice, or even a tendency to them. Let us for a moment compare our practice with others, and see how they correspond. It is often said that our views of the pathology of *fevers* and *inflammatory* diseases do not materially differ from that of other schools. The allopath, in accordance with his pathology, will plunge the lancet into the veins, and rob the system of the very pabulum of life—then bring it under the influence of the most antiphlogistic agents, and so keep it until it is brought to the lowest point of vitality. On the contrary, we take no blood from that excited system, we use no remedies that are calculated to reduce the proper forces of the system; and become *alarmed* at the great loss of vitality in severe cases. And our great endeavor is and ever should be, so to remove obstructions to the play of the physiological functions, as to keep them acting as much up to the standard of health as possible. The question then may properly be asked, if our pathology is the same, how can our practice be so diametrically opposite, not only in febrile and inflammatory diseases, but in most of the cases we treat? As eclectics, our pathology of fevers and inflammations does not agree with that of the allopathic faith, for we are led to believe that in all febrile and inflammatory diseases there is an absolute diminution of vital heat in the system, and the peculiar febrile and inflammatory manifestations which usually occur in those forms of diseases, are only caused by an unequal distribution of the vital forces; and hence our aim is to remove obstructions to the performance of the different physiological functions, restore an equilibrium, and the patient is cured; and while we do not desire to be regarded as egotistical, we believe that a careful statistical investigation will show a favorable result in the treatment of that class of diseases by those of our faith—in the employment of those remedies acting in harmony with the laws of life. Says an able writer,—"Physiological facts of course must be the same in all schools, but the application of these facts to the different abnormal conditions may be as varied as the prejudices or attainments of those who chance to make them, and according to our views of the different pathological conditions of the system, so will our therapeutics be; for what are therapeutics based upon, except it be admitted pathological conditions?"

Now let me inquire, what does this assumed condition lead us to? It should be regarded as an index pointing to the true philosophy of the eclectic system; a voice that speaks to us in unmistakable terms, that if we would succeed and cultivate the spirit, as well as adopt the form of eclecticism and progress, we must take high and independent ground, should abandon a pathology which we are every day declaring false by our practice; and at once ground our own upon what we believe to be true physiological science. We believe it can be clearly demonstrated upon physiological grounds that it is deleterious and empirical to resort to general bloodletting, in any case when other means of treatment are at command; and we also believe that the use of mercury in its various preparations can, from its chemical action and changes, and pathogenetic effects upon certain organs and functions, which must invariably take place when administered, be shown to be just as empirical and deleterious. Did time permit, we might read from a *prize essay*, delivered before the Conn. Med. Society (Allopathic), in May last, in which mercury was severely denounced, as having no *specific directness in its action as a hepatic remedy*, and also condemned as a remedy unsafe and uncertain in its action. And further, extolling in flattering terms the podophyllin, as a remedy safe and certain in its action upon that organ. (See Prize Essay by Ives, M. D., before Conn. Med. Society, May, 1866.)

We have thus spoken briefly of American Eclecticism, its history, its utility; giving but a faint and general insight into the matter, by the brevity of our remarks, and feel entirely dissatisfied with the feeble exposition given, but in passing will briefly allude to its manifest *destiny.* And while we firmly predict for it a brilliant future, we should not lose sight of the great good we have already accomplished in modifying the severity of medical treatment as it has existed in this country, previous to the introduction of the system of Liberal Medicine. The most casual observer cannot fail to discover the less frequent employment of venesection, in that class of diseases in which it has been long regarded as indispensable. In Pleuritis, Pneumonitis, and a large class of other inflammatory diseases, in which it was formerly employed, it is seldom resorted to now. What has accomplished this great change? Not, as you will be likely to be told, "that diseases have changed," that constitutions and climates require different treatment now, that there is a different pathological action in those diseases now than existed in times past. The real cause I conceive to be, a change in public sentiment in these matters, demanding a modified treatment. And this is one of the great benefits resulting from agitation of thought in these matters, plainly demonstrating that "the agitation of *thought* is the beginning of wisdom." While we accede to all systems of medical practice some truths, and acknowledge among their advocates many men of distinguished scientific attainments, and while we would extend the "right hand of fellowship" to all who disenthral themselves from prejudice and medical exclusivism, who are willing to "seize upon truth wherever found," we have no sympathy with medical exclusiveness, no fellowship for those who claim for themselves all the skill, all the science; and virtually, by their course of action, say, we have attained the summit of medical science. For we believe the science of medicine is progressive; that truth should be gleaned from every system of practice, and from every available source; nor should the humane physician, who truly feels the responsibility of his position—called, as he is, to stay the progress of disease, to assuage the pangs of the suffering—fail to bring to his aid all the available means at his command, from whatever source they may be derived. When we remember that the mind of man, in the honest pursuit of knowledge, is never at rest; that it explores the broad fields of nature—descends into the depths of the sea—wings its way to the blue arch above, and seeks to find some new beauty in every star that twinkles there—how unreasonable, then, that we should stifle investigation, that we should encumber the wheels of progress, that we should become recluse in our researches, especially on a subject of such vital interest to the human family.

We have thus attempted feebly and briefly to portray some of the benefits resulting from the eclectic or progressive system of medical practice; have pointed out what we believe to be some of the great advantages arising from the adoption of a system of medicine acting in harmony with the laws of life and health. And in conclusion let me say, that a better day is dawning upon the medical world; already it cheers the heart, as its salutary light rolls back the dark clouds of error, and scatters the mists of superstition, inspiring the soul with hope, and stimulating it to new exertions. Medical reform is rapidly progressing. The long-established errors of old systems are already being crushed by its triumphal march. Nor is its final triumph in any way contingent. The past will bear witness to its eternal origin; the present is demonstrating its immutable vitality; and the future shall witness its victory!

PERISCOPE.

Injection of Acetic Acid in Cancerous Tumors.

The novelty of the past two months is the injection of acetic acid in the substance of cancers in order to secure their removal by absorption. The plan is brought forward by Dr. Broadbent, a physician who is thought highly of in

London. It suggested itself to his mind in consequence of the known solvent powers of this acid upon cancer cells as seen under the microscope. Dr. Broadbent recommends that about forty drops of a mixture of one part of acetic acid with five or six parts of distilled water should be injected into the cancer; the point of the syringe being thrust (subcutaneously) into different parts of its substance during the operation, so that the agent is well disseminated through it. The injection is repeated at intervals, varying from six to ten days or longer according to its effects. The method is now being extensively tried, and many cases are reported in which large cancers have been completely and almost painlessly removed. Its true value can by no means be pronounced upon at present. —*Foreign Correspond. Southern Journal Medical Science.*

To make Beef-Tea Nutritious.

Let the cook understand that the virtue of beef-tea is to contain all the contents and flavor of lean beef in a dilute form; and its vices are to be sticky and strong, and to set in too a hard jelly when cold. When she understands this, let her take half a pound of fresh-killed beef for every pint of tea she wants, and carefully remove all fat, sinew, veins and bone. Let it be cut up into pieces under an inch square, and set to soak for twelve hours in one-third of the water required to be made into tea. Then let it be taken out and simmered for three hours in the remaining two-thirds of the water, the quantity lost by evaporation being replaced from time to time. The boiling liquor is then to be poured on the cold liquor in which the meat was soaked. The solid meat is to be dried, pounded in a mortar, and minced so as to cut up all strings in it, and mixed with the liquid. When the beef-tea is made daily, it is convenient to use one day's boiled meat for the next day's tea, as thus it has time to dry and is easiest pounded. Some persons find it more palatable for a clove of garlic being rubbed on a spoon with which the whole is stirred.—"*The Indigestions*," *by Dr. Thomas King Chambers.*

Ventilation for Invalids.

DR. THOMAS INMAN (*London Medical Mirror*) thus alludes to home ventilation: "When speaking of airiness, I do not mean individuals to encourage draughts of cold air about their persons, nor can I recommend them to do as a medical friend is said to do, viz. open the windows of the bed-room at night to get the fresh country air, which the town smoke vitiates during the day, so as to make it too impure for use. There may be differences of opinion on the subject amongst those who observe little; but amongst those who do, the belief is entertained that warm air moderately impure (as in a closed bed-room where two or more are sleeping), is less noxious to the invalid and those whose health is shaky, than is cold air and absolute purity. The purity does not counter-balance the effect of the chill."

Health and Holiness in Cincinnati.—A Lecture delivered on Sunday Evening, March 24, 1867, *at the Church of the Redeemer by the Minister of the Church*—REV. A. D. MAYO.

WE copy the closing remarks of this able address as reported in the Cincinnati Daily Commercial, March the 25th, 1867.

It is to be hoped that the Sanitary Board will be benefited by the suggestions.—(Ed. R.)

"The population of Cincinnati last year, within municipal limits, was probably 210,000; of which 6,000—*one in thirty-five of us all*—were removed by death.

"Of this number at leat 2,000 persons died of cholera during three months of summer and early autumn. Not less than 4,500 cases of cholera were reported to the Board of Health, of which nearly half were fatal. It is estimated that twenty per cent. of those who recovered, were left with permanently impaired health. Two-thirds of those who died were able-bodied men and women.

"We have no heart to speak of the private sorrow, the wide-spread bereavement and spiritual suffering involved in such a history. Neither can we estimate the moral loss to our community from such a cause. It is true that for every one who passed away another may have come. Our streets are alive with an increasing population; the life of the city runs with greater volume in deepening channels; and only by going, as the physicians and the clergymen are accustomed, from house to house, can we realize how many sacred places are vacant, and how many beloved faces will smile no more on earth. But the stern figures remain, each like a warning finger pointing to our physical transgressions. We cannot burden Providence with the odium of such wholesale slaughter, until we have turned from the error of our crooked physical ways to walk in the straight paths which lead to bodily health and life. It is not half so strange that one of every thirty-five of our population died last year, as that not one in a thousand of our people have been warned by this event, or are asking how, at home, or as citizens, they can avert the same result in the present year.

"The doctors have already raised a timely note of warning, and we are within two months of the summer heats. We have not an hour to lose if we would prepare our city for what is probably before it. It is high time that every man set his house in order, and kept it in cleanliness to await the foe. But the mass of our people will not do this, and in the name of humanity we demand from our Legislature a law strong enough for our protection. We are behind no man in our devotion to human rights; *but no man, be he millionnaire or beggar, has the right to poison me by any nuisance, however dear such abomination may be to himself.* Only the most stringent law can penetrate to the depths of this uncleanness and overcome the selfishness that imperils our lives. Do not be afraid, honorable gentlemen at Columbus, to make your medicine too strong. Our sins are great; our disease is vital. Give us thorough work; put into our hands a weapon with which we can make a real onset *upon these fortified realms of death. And when our laws are enacted, let the solid people of Cincinnati close up, a thousand deep, around our City Government and demand their* *uttermost enforcement. And let the swift wrath of this people strike every faltering politician or timid official who hesitates an instant in this imperative duty.*

"A hundred thousand dollars, perhaps fifty thousand dollars, wisely and immediately expended, with the vigorous and intelligent co-operation of that portion of our people who have a character to maintain, will accomplish all that can now be done to avert the imminent danger. Fifty thousand dollars is a great deal of money; but let us glance at a little bill which our people have been called to pay during the past year.

People of Cincinnati,

To the Cholera,	Dr.
1. To lost labor of 1,500 laboring people, at $2 per day, 300 days	$90,000
2. Public appropriation for health last summer	40,000
3. Expense of medical attendance on 4,500 cholera patients, at $10 each	45,000
4. Expense of burying 2,000 people, $20 each	40,000
5. Expense of private cleaning in the city, and cost of absence from fear of disease, estimated at $1 for each inhabitant	210,000
6. Loss of trade, estimated by reliable business men, from this cause	1,000,000
7. General derangement of business in the city and suburbs, consequent thereon	500,000
Amount in full	$1,925,000

"In round numbers, we paid the sum of $2,000,000 last year to this invader of our peace. This may be an over-estimate. But we can make all reasonable discount, and still understand that the way to save our money leads along the same path by which we can save our lives.

"If we are told that God only can give or take away our life, we answer, God co-operates with man in every reasonable effort to elevate the physical and spiritual health of his children. We adore his loving Providence, whether it keeps us in this world or bears us to another. But we have no fear that our uttermost obedience to his beautiful laws of our being, will embarrass the Holy Spirit in our salvation. We are living in perpetual violation of the wise and good ordinances of our Heavenly Father. Our habitual sins against our bodily sanctity can only be outgrown by patient labor and a religious determination to learn our duty and obey it. But our more flagrant public abuses can be driven out of existence by the concentrated public opinion of those who are outraged by their existence. During the last fifty years 400,000 lives have probably been saved in Europe by vaccination alone. There is no evidence of the displeasure of Providence over this great physical salvation in the Old World. And if we, the people of Cincinnati, will mend our ways, and make our city the healthiest of great American towns, we may reasonably hope that with increasing health will come a nobler opportunity for that holiness which is only the perfect wholeness of body and soul in man, the wondrous, immortal child of God."

Empiricism vs. Rationalism, by Edward G. Loring, M. D., Baltimore, Md.

Strange as it may seem, physicians of the present day, as a class, practise better than they preach. The reason of this apparent anomaly is, that modern medical observation and research have discovered certain laws of nature, and certain actions of drugs, which cannot be explained. Practice has consequently outrun theory, and while the physician is content with rapidly gathering in and making use of these results, medical expounders are often delayed by searching after the reason, which they think it their duty to account for, and in doing this they are further retarded by having, in order to make themselves intelligible, to make use of antiquated terms, which modern science has either rendered inadequate or even meaningless. Since, too, the mechanical and physical means of examining into nature have been carried to such a degree of perfection, it is difficult for a writer to keep pace, through the medium of the press, with the march of science. Before the work appears, some special research has cut off, in their prime, the author's elaborate theories, while an appended foot-note, in the finest print, has to serve, like a graceful epitaph, as an acknowledgment of decease and an appeal for mercy.

On the other hand, this faith on the part of the practitioner is certainly, whatever it may appear at the first sight, a graceful concession on the part of science to nature—an acknowledgment of ignorance, which wisdom in reality alone could afford to make. It is, in fact, a mild triumph of "empiricism" over the once vaunted and scholastic "rationalism" which medical writers and lecturers are usually the last to admit or take advantage of.—*Boston Med. and Surg. Journal.*

Cannabis Indica as an Antispasmodic, by Geo. F. Salmon, M. D., New Lebanon, N. Y.

March 23, 1866. I was called to see C. W. H., aged 65. I found him suffering from a very severe attack of typhoid pneumonia. Tonics, stimulants, and expectorants were prescribed. The case progressed favorably until the ninth or tenth day, when the vital powers began to show a greater disposition to sink, and the following more marked typhoid symptoms were developed; typhus apthoideus of the pharynx and fauces, accompanied with great exhaustion, a feeble pulse, and very severe singultus.

I speak of the above remedy as an antispasmodic, for the relief of the latter symptom. This distressing and extremely prostrating feature of the case continued, almost without cessation, for five days and nights. Ether, chloroform, musk, castor, and assafœtida were employed. In connection with these a blister was applied to the epigastrium. Also a bandage around the diaphragm.

Dr. C. was now called in consultation, who thought the hiccough was caused by the accumulation of carbonic acid gas in the intestines. He suggested that an enema of chloride of soda should be given the patient. This was administered without producing the least perceptible effect. I was now induced to make a trial of Cannabis Indica. Tilden's extract was ordered to be given the patient in eight-drop doses, every hour. The hiccough soon subsided, but returned during the night. Again the hemp was administered, and again the symptoms were discussed and kept in subjection by the use of this remedy. Patient made a good recovery.

I have used the hemp to prevent the paroxysms of asthma, with good success; and have found it a valuable agent in hysteria, and in the treatment of females, while undergoing local treatment, to allay great nervous irritability of the system, produced by the various forms of uterine diseases. I consider Cannabis Indica one of the most serviceable agents in the Materia Medica. It is deserving of more credit than it has received.—*Journal of Mat. Med.*

EDITORIAL.

The Eclectic Medical Review.

With the present number closes the first year of the existence of the American Eclectic Medical Review. Each of its numbers from the first has been prepared with the utmost care, and we think we can truthfully say that it stands at the head of the Medical Journals of the country, for the interesting and valuable character of its articles, the elegance and style of its typography and make up, and for its general ability and tone. Its circulation has reached the paying point, and we hope to carry it forward until it shall become a classic and a landmark to the whole American people, leading them from the disastrous and pernicious dogmas and practice which have poisoned to universal ill health nearly every man, woman and child of the present generation in this country.

The Review will continue to be the stanch advocate of pure Eclecticism, and will endeavor to be just and generous where generosity would not be a crime against the health of the people. To our colaborators on the Review, we owe much of its success and high character. We have seen no reason to mention any discourtesy on the part of our editorial brethren and have sought to foster a spirit of union and good fellowship among the practitioners and journals of our school.

This policy will be rigidly adhered to in the future. The Review for the coming year will be one of the best mediums for professional and general advertising among the journals of the class to which it belongs, and we have every reason to look forward with hope and confidence in regard to its future well-being and usefulness.

We would be pleased to have all the present subscribers renew their subscriptions immediately; this will enable us to form some idea of the size of the edition to print. We hope the Eclectic Medical Profession will aid in extending its circulation. We feel assured that its merits fully justify an appeal for a large and generous support.

New York State Eclectic Medical Society.

This important medical association will hold its annual meeting June 14, at Saratoga, this year. This Society, now in the fifth year of its existence, is organized under a special charter, with every advantage ever embodied in a charter for such a purpose. It has a large and constantly increasing membership from all parts of the State, and the annual meeting at Saratoga will be more important than any that have preceded it, as many questions bearing upon the future development and systematized organization of effort, will be considered and decided upon at this meeting. If Eclecticism is to be in the future a system to be respected and to wield efficient powers of aggression and defence against professional intolerance and malpractice, the members of the Eclectic medical profession must subordinate merely selfish individual aims to a combined and united policy and plan of action. Hereafter, the annual meetings of the Society should be held at Albany, during the session of the Legislature, so that the power of Eclecticism may be directly felt upon the legislation calculated to advance its interests, and to prevent such underhanded and villainous attempts as have more than once been attempted, and sometimes with success, to deprive us of our just rights. We have not been disappointed in our estimate of the intolerance, unfairness, and utterly unmanly character of allopathic opposition to any attempt to secure for Eclecticism the legislative aid and recognition, even for its strictly free benevolent institutions, to which it is entitled.

We sincerely hope that the attendance will be large and general from all parts of the State, as some important propositions will be submitted in regard to the Eclectic Medical College of the City of New York, and to the best methods of advancing our cause. Several of the Trustees of the College will be present at the meeting, for the purpose of ascertaining the amount and character of support the institution may reasonably look for from the State Eclectic Medical Society.

The Second Session of the Eclectic Medical College of the City of New York.

The annual announcement for 1867 of the Eclectic Medical College of the City of New York, which commences October 15 with a preliminary session of two weeks, will appear very soon and be widely circulated. There is every prospect that the second session will be very largely attended from all parts of the country. New York city beyond all places on this continent stands preëminent for its medical educational facilities. Wishing success to all Eclectic medical schools, we shall labor for the well-being of the Eclectic Medical College of the City of New York, and would cordially invite the attention of practitioners having students in their offices, and of all desirous of entering the medical profession to come up, and fully understand what we propose to do.

Annual meeting of Eclectic Medical Societies.

The seventh annual meeting of the Massachusetts Eclectic Medical Society, will be held at the Revere House, Boston, June 6th, 1867.

The Eclectic Medical Society of the State of Vermont holds its annual meeting at Montpelier, June 6th, 1867.

The Eclectic Medical Society of the State of Maine will hold its annual meeting at Portland, June 25th, 1867.

The State Eclectic Medical Association of Indiana holds its annual meeting on the 4th and 5th of June, at Indianapolis.

The State Eclectic Medical Society of Ohio holds its annual meeting at Lebanon in that State, commencing May 29th. All these societies are large and influential, and we should be glad to meet with them and possibly may do so.

The New Volume.

There will be in each number of the coming volume of the Review, from the pen of Prof. Robert S. Newton, one of a series of surgical papers, with report of cases and clinical remarks.

There will also be in each number a paper from the pen of the late Prof. W. Byrd Powell. We have quite a number of his most able and valuable essays, many of which have never been published, and as his views and doctrines of the Human Temperaments, the Life Line, Incompatible Marriages, etc., are attracting universal attention and a cordial recognition and adoption by the more progressive, liberal, and enlightened portion of the medical profession, they cannot fail to prove of peculiar interest and value to our readers.

The Cycloid Piano at the Exposition Universelle.

This beautiful and unique instrument, which is entirely unequalled in its way, seems to be studiously ignored by the apparently bought up correspondents employed to make their descriptions of the great Exposition, the mere framework for the business axes they are bribed or coaxed to grind in the newspapers, at the expense of a too often gulled public. One of these scribblers announces a decision in favor of Mr. S. by the eminent musical jury; this is the only point at which any person is mentioned in connection with pianos; another states that the decision is not yet made; another, after spreading out half a dozen columns, mentions several names and finally ends in a grand splurge over the same Mr. S., who, he says, is represented by seven pianos; while another writer says it is but five; still another has it that the contest is narrowed down between Mr. C. and Mr. S., remarking incidentally, that there are only three American exhibitors of pianos. Why did not the writer mention the third exhibitor, will be asked by many; can it be that the answer is, the writers were not paid to do so, having been bought up to aid in overslaughing all except fish too big to be ignored. The public should look with the greatest distrust upon these *dispassionate* and *unbiased* fulminations which will be made to flood the country during the coming season, and which will be the staple of a multitude of advertisements and "Bohemian puffs." Whoever wishes to buy a compact and elegant piano of great power, admirable quality of tone, and of permanent durability, will find it in the Cycloid piano made by Lindeman &

Sons, the third of the American exhibitors at the World's fair in Paris—where there can be but little question that they will be deemed entitled to a high award for their truly admirable instrument—which has fully the power of the best semi-grand with but about two-thirds the size, a much more elegant and tasteful shape, and has the advantage of resting on three legs; while from its peculiar structure it is much more solid, and remains longer in tune than any other piano whatever.

The Weed Sewing Machine.

This is one of the first-class sewing machines, which has been known less extensively to the sewing public than its very great practical merits deserve. The new family machine, which is just now for the first time being introduced to the public, is more perfectly finished, and fully equal to any shuttle machine, now before the public, so far as we have seen and examined, and we believe we have seen and examined all of the various sewing machines advertised and unadvertised, that can lay any claim to special merit. The Weed machine is finished in every part in the most conscientious and effective manner, its simplicity, durability, and perfection of mechanical arrangement, place it in the front rank, and in several particulars it is entirely unexcelled. It is more nearly noiseless than any other shuttle machine. Its arrangment for taking up the thread is durable, and exceedingly ingenious. Its tension is uniform and perfect; it will do fine stitching more perfectly than any shuttle machine we have ever seen. And it is capable of every variety of work required in a family and for ordinary branches of tailoring, and compares with the lumbering, imperfectly finished Singer machines in style and efficiency more than favorably. While its delicacy of finish is not excelled by the finest Wheeler and Wilson machines—and this is the very highest praise. It has few parts; its use is more easily learned, and it is more free from practical defects affecting work, than any other shuttle machine in existence, never oiling or soiling the most delicate. We speak more immediately of the new family machine. This new Weed candidate for favor is no "Pig Weed" we can conscientiously assure all who wish to purchase the very best family sewing machine making the shuttle lock-stitch, to be found anywhere. The Weed machines are manufactured at Hartford, Conn., and are turned out at the rate of about 2,400 a month, by a system of the most perfect and ingenious machinery yet devised for making shuttle sewing machines. The price of the new Weed machine is the same as that of other first-class family machines—there are several heavy manufacturing styles of the Weed machine. The lightness and ease with which the new Family machine is operated will make it specially valuable to ladies who are obliged to sew for their families. The great drawback of many sewing machines is the injury they do to the health of ladies of feeble constitution, and burthened with the cares of the family—an evil that has become very apparent to the observant medical man. It is one of the attractions of the American department at the Exposition Universelle at Paris, and will undoubtedly become the most popular and enduring of existing shuttle sewing machines, so soon as it is properly placed before the public, and the very heavy patent tax of $7.00 on each machine shall die out by limitation of the undeserved monopoly rights of the Sewing Machine Combination. The new offices and sales-room are on the site of the old St. Thomas Church, corner of Houston and Broadway, with Maillard's renowned restaurant sandwiched between them, and the magnificent establishment of Wheeler and Wilson. Here on a single block are to be found the concentrated perfection of art in mechanism as developed in the sewing machine. A beautiful display of practical samples of workmanship of the new Weed Family machine are being prepared for examination in the show cases of the establishments of the company in this country, and for those now organized in London and Paris.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

A Treatise on the Principles and Practice of Medicine, designed for the use of practitioners and Students of Medicine, by Austin Flint, M. D., Professor of the Principles and Practice of Medicine in the Bellevue Hospital Medical College; in the Long Island College Hospital, etc. Second edition revised and enlarged. Pages 967. Handsome extra cloth, $6,50; or strongly bound leather, with raised bands, $7,50. Henry C. Lea, Publisher, Philadelphia.

The speedy exhaustion of the first edition of this work has called for another, which the author has supplied, enlarged by the description of three diseases not found in the first; also by additional considerations on cholera. The general arrangement of the contents is the same as before, into two parts; Part 1st, treating of the Principles of Medicine, or general Pathology, and Part 2d, of the Practice of Medicine or Special Pathology. Under the former, he considers Anatomical Change in the Solid parts of the body; Morbid Conditions of the Blood; Etiology; and Prophylaxis or general Therapeutics. There are many things in the entire work that are excellent—in fact it is full of valuable matter, well elaborated. Although the author holds to some as we think erroneous opinions, for instance those on Carcinoma, he holding that a primary cancer involves an antecedent or underlying unknown special pathological condition called a cachexia. He however quotes the opinions of Robin and Virchow, who regard the cancer-cells as resulting from a deformation of epithelium or other normal anatomical elements, which at the same time are multiplied to a greater or less extent. This is essentially the view that we hold, and that the constitutional discrasia comes afterward. The Author in his effort to condense within circumscribed limits much matter of great and primary importance, has succeeded admirably, at the same time he cannot be accused of destroying the interest in the subject handled by his manner of elucidating it.

In part 2d he treats each particular disease in a clear and concise manner giving a lucid description of its anatomical characters, pathological condition, causation, diagnosis, prognosis, and treatment. In the treatment of disease he has divested himself of the antiquated doctrines found in such standard works as Wood's and Watson's practice, which have always been quoted as law—by some; and pretty generally discards mercury and the lancet, although he does not fully. For instance, in bronchitis, he says of Blood-letting: "It should enter into the treatment of a certain proportion of cases, provided other and more conservative means for the same ends are not available,"—evidently admitting that other means can and do succeed. "The evils of blood-letting arise from its spoliative effect upon the blood," etc. Under the same head, a little further on, he says, referring to the doctrine of a change of type in disease, owing to a notable change in the human constitution: "This opinion seems to me not well founded. After a professional experience extending beyond the period just named, (25 years,) I do not hesitate to express a conviction, that acute inflammations, at the present day, are essentially the same that they were twenty-five years ago, and that antiphlogistic measures were no more appropriate then—than now." In the treatment of Pneumonitis, he is very guarded in advising the use of blood-letting, and condemns it entirely in all but the first stage of plethoric and robust cases. He might by a little more boldness, have condemned it altogether, and done without it, as we do in all cases. He strongly condemns Tartar Emetic and mercury in the second stage, and says that for many years he has discontinued their use. He opposes the use of mercury in dysentery, and says that "chemical observation fails to furnish evidence of any curative influence to be derived from mercury." In the section on acute Hepatitis, the author makes this remark,—"but the doctrine so long held, that mercury increases the secretion of bile, is to say the least, open to much distrust,"—which we think is a favorable indication, that at some no distant day, the allopathic school will discard it altogether. He does not even suggest it in the treatment of intermittent, remittent and yellow fevers, but distinctly opposes the use of both mercury and blood-letting. Now while the Doctor thus deprives his pupils and the profession (allopathic) of their main resource as a chologogue, I mean mercury, he gives them nothing as a substitute. Certainly *he* uses something. If not and he is anxiously seeking for something, *we* can recommend an agent which is being largely used by the profession all over the country, Podophyllin, the active principle of the May Apple —which will fulfil all indications. It is strange that in his researches into medical literature, he should have so neglected that of his own country, so much as not to know of the use of many valuable agents, concerning the use of which he is entirely silent. While we give him great credit for the great work he has accomplished, we suggest that if another edition be called for, he supply this remarkable deficiency in the practical part of it. It is printed on good paper, in readable type, strongly bound in leather, and well worthy a careful and studious perusal.

NEWS AND MISCELLANY.

Eclectic Medical Society, of the State of New York.

The Fifth Annual Meeting of the Eclectic Medical Society of the State of New York will be held on the Second Wednesday (12th) of June, 1867, at 10 o'clock, A. M., at St. Nicholas Hall, Saratoga Springs.

The Annual Address will be given by Prof. Edwin Freeman, M. D. Essays will be read, and Papers presented by the different Committees appointed at the last Annual Meeting, and Officers will be elected for the ensuing year. Delegates are expected to be present from other State Societies and participate in the proceedings. It is hoped all members will be punctual in attendance, as business of interest and importance to all will be transacted. It is expected that the Transactions of the Society, printed by the Legislature of the State, will be ready by that time to be delivered to the Members. Our Society is growing in numbers and importance, and as we now enjoy the same legal privileges with those of any other Medical Society in the State, it is desirable that we present, as far as may be, a full gathering of all our Brethren in Council; for, as Eclectics, we believe our practice based upon the principles of Truth, and we should show to the world that we feel interest enough in our system to come together at least once in a year, to further the objects of those principles which we believe have in view the most momentous interests of mankind.

Respectfully,
WM. W. HADLEY, M. D.,
546 Broadway, New York. Secretary.

Abstract from Braithwaite's Retrospect.

Citric, Acetic and Carbolic Acids.—Citric, acetic, and carbolic acids, when applied in a diluted state to cancerous tumors, have a powerful effect in removing pain. The carbolic acid has a powerful effect in correcting the offensive fœtor of cancerous discharges. All three have a solvent effect on cancerous tissue, the citric acid least, the acetic acid next in degree, and the carbolic acid most. When a weak solution of carbolic acid is applied to cancer cells under the microscope, they are dissolved and the nucleus even disappears almost entirely. In a case of mammary tumor, to which it was applied, the thick, serrated, and everted edges disappeared, and cicatrization of many of the sores occurred. The following is the best formula:—Acidi carbolici ʒ iss.; spiritûs vini rectificati ℥ j.; aquæ ad ℔ij. (Dr. J. Barclay.)

Gout.—*Inhalation of Oxygen.*—The formation of urea instead of uric acid may be determined by supplying oxygen. Oxygen may be directly inhaled, or the binoxide of hydrogen exhibited in one-drachm doses diluted in about two ounces of water. This has a marked influence on the biliary secretion, which it increases in quantity and improves in quality, often producing excessive biliary dejections, thus relieving congested livers and secondary bronchial congestion. The inhalation of a mixture of oxygen and air, in the proportion of one to four, pretty uniformly clears the urine of lithates. (Dr. R. H. Goolden.)

Typhoid Fever.—The most successful plan of treatment of typhoid fever (only one case in forty proving fatal) is the following: Strong beef tea and milk every two hours, together fourteen pints every twenty-four hours, and twenty drops of dilute nitro-muriatic acid every two hours. The late Dr. Henderson, of Shanghai, stated that by its adoption the mortality from continued fever was diminished from 28 per cent. to 7 per cent. (Dr. T. K. Chambers.)

Typhus Fever.—*Amount of Urea Excreted.*—During the second week of typhus fever the quantity of urea excreted daily is decidedly below the standard of health, notwithstanding the presence of a state of high fever. This is contrary to the generally received doctrine that fever consists essentially in an increased metamorphosis of tissue. The intensity of the head symptoms coincides with the lowest urea excretion, and their improvement coincides with or follows on an increase in that secretion.

Chorea.—*Calabar Bean.*—The calabar bean promises to be an effectual remedy for chorea. It should be given in half-drachm doses of the tincture (ʒj. of the bean to ℥i. spirits of wine) three times a day, in water, and gradually increased if necessary. In one case which had gained no ground for more than two months, this plan of treatment produced most marked improvement in a fortnight, and cure in four weeks. In some cases no benefit seems to follow its use, but this may be said of any medicine.

Bromide of Ammonium.—It is of the greatest importance to procure sleep in patients attacked with a morbid increase of the reflex excitability. In cases in which there is sleeplessness owing to some cause of cerebral excitement, sleep is almost invariably induced by giving to adults a dose of thirty grains of bromide of ammonium a quarter of an hour before the last meal, and a second dose of from thirty to fifty grains at bedtime. (Dr. C. E. Brown-Séquard.)

Lumbago.—*Ether Spray.*—If there is no gouty or rheumatic condition, instant relief is sometimes attainable by the use of Richardson's ether spray. (Mr. J. B. Walker, *Lancet*, March 17, 1866, p. 299.)

Pain.—*Subcutaneous Injection of Morphia and Atropine.*—Inject together half a grain of the sulphate of morphia with one-sixtieth of a grain of sulphate of atropine, and the good effects of both against pain are obtained, without the bad effects. (Dr. C. E. Brown-Séquard.)

Spine.—*Effects of Cold and Heat to the.*—Cold and heat applied to the spine produce definite and constant effects, exactly the opposite of one another. Ice applied to the spine increases the general circulation, stops the cramp of voluntary and involuntary muscles, proves an effective remedy in epilepsy and other convulsive affections, cures sea-sickness, restrains the sickness of pregnancy, arrests diarrhœa, recovers patients from the cold stage of cholera, and finally promotes menstruation. On the other hand heat along the spine lessens the general circulation, overcomes congestion in all parts of the body, lessens fever, restrains hemorrhage, and lessons or arrests the menstrual flow. (Dr. J. Chapman.)

CONGESTION.—*Internal Use of Chloroform.*—Chloroform given by the stomach and rectum does not produce any symptoms of anæsthesia, but has the effect of equalizing the circulation of the blood and so relieving congestion. It may be thus used in all cases of congestion whether sthenic or asthenic. (Dr. Merril.)

HEMORRHAGE FROM WOUNDS OF THE HAND.—In cases of hemorrhage from the hand occurring from several points simultaneously, flex the forearm forcibly upon the arm, and the hemorrhage will cease, owing to the acute angle at which the radial and ulnar arteries are placed. (Mr. J. Hilton.)

DIPHTHERIA.—*Hyposulphites.*—The incipient exudation of diphtheria may frequently be removed in forty-eight hours by the application twice a day of a strong solution of hyposulphite of soda, viz.: ʒiij of the hyposulphite, glycerine ʒij., with ʒvj. of water. A weak gargle may be used every hour. (Mr. J. C. Maynard.)

CHOLERAIC DIARRHŒA.—When abruptly checked by opium, choleraic diarrhœa often returns immediately the effects of the opium passes off, the patient meanwhile having a hot skin, quick pulse, and headache, or the patient may pass at once into the stage of collapse. It should be treated by emetics, castor oil, or some other mild laxative, and cold water; not one case out of a large number so treated passed into the stage of collapse. The effect of the opium is highly prejudicial, for it arrests the elimination of the poison through the mucous membrane of the bowels. (Dr. Johnson, *British Medical Journal.*)

CHRONIC ENLARGEMENT OF THE LIVER.—Mercury is useless and indeed actually injurious in cases of chronic enlargement of the liver, such as occurs amongst Europeans in the East Indies. The nitro-muriatic acid bath is of great use. An ounce and a half of strong acid must be added to each gallon of water to form a bath. The patient before going into the bath should be covered over with blankets until a gentle perspiration is induced, and when in the bath a covering blanket should be drawn over the head and shoulders to confine the steam and enable the patient to inspire it. The external application of acids acts far more quickly and surely than their administration by the mouth. Even in irremediable cases the bath proves useful in cleaning the tongue, improving the appetite, abating thirst, and in many cases in retarding the progress of disease. It is necessary that the bath be made of wood, and it must be no larger than is absolutely needful to contain the person. When the patient is in so weakened a condition as to be unable to bear the immersion or sponging, a swathe dampened in the solution must be worn round the body and covered with oiled silk. This may be continued for any length of time, and great advantage is often the result. (Sir J. Ranald Martin.)

TÆNIA.—*Turpentine.*—Oil of turpentine, combined with castor oil, three drachms of each, is a better remedy for tænia than oil of male-fern. (Dr. Headland.)

BILE IN THE URINE.—*Detection by Chloroform.*—Place in the test-tube forty or fifty grammes of the urine to be examined, and add to it four or five grammes of chloroform, and then shake the mixture. If the urine contains bile it immediately assumes a fine yellow color, and on allowing it to rest the chloroform falls to the bottom of the tube, drawing with it the fatty matter of the urine colored by the yellow biliary substance. (M. Cunisset.)

POLYDIPSIA—(*Diabetes Insipidus.*)—Valerian administered in large and rapidly increasing doses, is a most serviceable remedy in diabetes insipidus. A case is related in which the specific gravity of the urine rapidly rose from 1,000 to 1,006 under large doses of valerian in powder. (Dr. Reith.)

SPLINTS.—*Gutta-Percha.*—No matter in what form the gutta-percha is, nor in how many small threads or large balls, place it in a vessel of water, and boil it till it is perfectly softened throughout; now collect it into one ball; dip it into cold water to enable it to be handled without burning, and knead it into a uniform mass with the hands. To do this, if it is very good and tough, will require some strength, and also warming two or three times; but eventually it will form a uniform plastic mass not much harder than stiff putty. When in this state, place it on any flat surface which is wet, and with a roller—a common glass rolling-pin dipped in water is the best—roll it into a sheet of the desired thickness, let the roller slide upon it in all directions, and continue this action till the surface is uniform; it will now be fit for cutting into shape. This can readily be done, either when hot or cold, with a pair of scissors, and no force is required to mould it into the form of splint required, the only precaution requisite being to hold it steadily in that shape till it is cold; after which it will not alter, unless again made hot. It may sometimes be requisite to join two pieces of gutta-percha together. This can readily be done by warming the two surfaces to be united by dry heat, with a hot iron, not burning, but merely softening the surface. Two such hot, dry, soft, clean surfaces will unite most perfectly when brought into contact with each other, if held together till they are cold. It may sometimes also be useful to know how two pieces of this material may be moulded on to each other without sticking. If one be cold and the other hot, they will not unite, especially if the cold surface be anointed with soap-suds. (Mr. E. Truman.)

LEATHER-FELT SPLINTS.—These simple and admirable splints consist of stout felt, lined on one side with wash-leather. All that is necessary for their application is to place a splint (with the leather side downwards) upon a table, then paint the felt side with a liquid which is supplied by the inventor (Mr. J. G. Hides, of Mortimer-street), then apply the splints to the injured limb, and bandage with an ordinary roller, leaving a little interval between each turn of the bandage. The splint hardens like a piece of wood in about thirty-five minutes. These splints are extremely light, and are capable of adaptation to any part without padding. They are about the same price as wood splints, and can be used again and again by merely painting the felt side afresh with a weaker solution of the liquid. (p. 130.)

ERYSIPELAS.—*Warm versus Cold Applications.*—Never use cold applications in cases of erysipelas. Warm fomentations medicated with poppy or hemlock should be used. The vitality of the part in which erysipelas occurs is always lowered. (Mr. J. Hilton.)

WOUNDS.—*Chloride of Zinc Lotion.*—The discharge from a wound, whether the result of accident or surgical operation, usually decomposes whenever covered for even a few hours, as evidenced by the peculiar sickly smell. If, however, the wound is well bathed with a lotion of twenty grains of chloride of zinc to the ounce of water, this is prevented, and the wound will frequently heal by the first intention, without swelling, pain, or discoloration. This plan has been tried in a variety of operations, the removal of tumors, amputations, even with extensive and thin flaps, operations about the rectum, involving the mucous membrane, and in the perineum. In many cases the wounds have healed in twenty-four hours, without fulness or swelling, and leaving a line of cicatrix which after a short time could hardly be seen or felt. (Mr. C. de Morgan.)

FUNDUS OCULI.—*To Examine without the Mirror of Opthalmoscope.*—Place the lamp on a table in a darkened room and let the patient sit on a chair two or three feet from the table, and facing the light. If the pupil is well dilated with atropine the fundus is seen to be illuminated, the surgeon sitting with his back to the light. A lens of about two inches focus is necessary to see the details of the posterior internal surface of the eye. (Dr. Roseburgh.)

CHLOROSIS.—*Iron.*—Iron is useful in chlorosis only because of a peculiar influence which causes the food to be transformed more easily into blood. Other metals which are not normal constituents of blood globules, such as manganese and silver, will sometimes act even better than iron. There is immense value in a purely hygienic means in the treatment of chlorosis. (Dr. Brown-Séquard.)

HEMORRHAGE AFTER LABOR.—*Injection of the Uterus with Perchloride of Iron.*—After clearing out the uterine cavity of placental remains and clots, inject a solution of perchloride of iron into the uterus. (Dr. R. Barnes.)

OVARIAN TUMORS.—*Chlorate of Potash.*—Four cases of ovarian disease are related in which the internal administration of chlorate of potash produced a most marked effect in causing lessening of the tumor; two were quite cured, the tumor altogether disappearing. A dessert-spoonful of a saturated solution of the salt was given thrice a day. (Mr. W. Craig.)

CHLOROFORM.—In cases of threatened mischief during the administration of chloroform, nothing does more good than pulling forward the tongue, whereby the epiglottis is likewise pulled forward and air admitted into the larynx. Chloroform should never be given to a patient in the sitting posture, or fatal fainting may ensue. (Prof. Spence, Dr. Gillespie, *Edinburgh Medical Journal, March*, 1866.)

MILK.—*To Prevent its turning Sour.*—Add to each gallon of milk a teaspoonful of a saturated solution of sulphite of soda. Even in hot weather the milk will remain sweet for a week or ten days, and the sulphite added is quite imperceptible. (Dr. J. Scoffern.)

PURIFICATION OF WATER.—Black oxide of iron possesses a remarkable power of separating the organic impurities from water. The best way of preparing it for this purpose is by heating together hæmatite, or red oxide of iron ore, with sawdust. The oxide as made by this process contains a small percentage of carbon, which, however, renders the substance harder and less brittle. If river water containing much organic impurity be made to percolate a layer of this substance a few inches thick, it will lose almost all organic impurity, and be perfectly pure both to taste and smell. It is an admirable substance to use in filters, and, moreover, does not lose its power in the least by time. (Mr. Thomas Spencer, *Med. Times and Gazette, April* 28, 1866.)

SMALL-POX IN LONDON.—Small-pox is prevailing to a frightful extent in London. Altogether there have been four hundred and sixty-two lives lost by this one disease in the space of thirteen weeks—an aggregate which may without exaggeration be spoken of as really alarming. It is most sad to reflect on the ignorant carelessness or the reckless folly of those who not only endanger the lives of their children and of themselves, but also jeopardize the lives of their neighbors and of the public generally, by neglect of the simple means available for reducing the baneful power of small-pox to a nullity. It is important that it should be known, moreover, that throughout the country—in large towns and rural districts alike—this loathsome and deadly malady is spreading, as well as in London.—*Lancet.*

Warning against the Simultaneous Prescription of Chlorate of Potash and Iodide of Potassium.—This has great importance; since in syphilitic and other affections these drugs are often combined. But M. Vee has demonstrated the danger of such practice by showing that the chlorate of potash gives up its oxygen, which forms with the iodide of potassium an *iodate*, whose toxic properties have been recently demonstrated by Melsen.—*Gazette Médicale.*

Changes in the Faculty of Paris.—The vacant chairs in the Faculty of Medicine of Paris have been filled as follows:—Professor of General Pathology and Therapeutics, Lassaigne; Professor of Pathological Anatomy, Vulpian; Professor of Therapeutics and Materia Medica, See; Professor of External Pathology, Broca; Professor of Internal Pathology, Oxenfeld; Professor of Internal Pathology, Hardy; Adjunct-Professor to the same chair, Raynaud. The resignation of Nelaton is spoken of.

Cholera Prize of Twenty Thousand Dollars.—One hundred and ten works were sent this year to the Imperial Academy of Sciences of France for competition. The report is highly interesting, and gives a good idea as to the manner in which cholera has been studied. The full prize was not awarded; but various amounts have been granted to Messrs. Legros and Goujon for their experimental researches; to M. Thiersch for his experiments on 104 mice with choleraic dejections; to M. Baudrimont for his atmospheric researches bearing upon cholera; to M. Worms for his essay on prophylactic measures; and to Dr. Lindsay, of Edinburgh, for his experiments on the transmission of cholera by the clothes.—(*Medical News and Library.*)

BOOKS AND JOURNALS RECEIVED.

The Causes, Symptoms, Diagnosis, Pathology, and Treatment of ChronicDiseases. By John King, M. D. Pp. 1607, Price $15.

This is one of the most valuable works ever published, a copy of which should be in the hands of every Physician and Medical Student in the country.

We congratulate both the author and the Electic Medical Profession, that this long promised and difficult work to produce, is now completed and ready for use.

The next number of the Review will contain a full and careful examination of the work.

Annual Report of the American Institute, of the City of New York.

Seventy-Ninth annual report of the Regents of the University of the State of New York.

Forty-eighth annual report of the Trustees of the New York State Library.

Sixth annual publication of the Massachusetts Electic Medical Society.

Charter and By-Laws of the American Institute of the City of New York.

Address before the Polytechnic branch of the American Institute, by Prof. Samuel D. Tillman.

The half-yearly abstract of the Medical Sciences, January. Henry C. Lea, Publisher, Philadelphia.

Buffalo Medical and Surgical Journal, April and May, 1867.

Eclectic Medical Journal of Cincinnati, April.

Boston Medical and Surgical Journal.

American Journal of the Medical Sciences, edited by Isaac Hays, M. D.

Herald of Health, April and May.

Dental Cosmos.

The Galveston Medical and Surgical Journal.

The Journal of Materia Medica, April and May.

The Dental Register, Cincinnati.

The Druggists' Circular and Chemical Gazette.

University Journal of Medicine and Surgery, Philadelphia.

The Hahnemannian Monthly.